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FILE COVERS 1907 - 6 Nov 2002 VOL 137 ISS 19 FILE LAST UPDATED: 5 Nov 2002 (20021105/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d	que 17			
L1		SEA FILE=HCAPLUS ABB=ON	PLU=ON	LEUKOTRIENE ANTAGONISTS+OLD/CT
L2	266	SEA FILE=HCAPLUS ABB=ON LEUKOTRIENE B4"+OLD/CT	PLU=ON	"LEUKOTRIENE RECEPTORS (L)
	4657		D7.11 OM	THURSDAY DAYON
L3		SEA FILE=HCAPLUS ABB=ON	PLU=ON	LEUKOTRIENE B4/CT
L4	1081	SEA FILE=HCAPLUS ABB=ON	PLU=ON	((L2 OR L3)(L)(ANTAG? OR
		INHIB?)) OR (L1 AND (L2		
L5		SEA FILE=HCAPLUS ABB=ON	PLU=ON	"CYCLOOXYGENASE 2"/CT
L6	650	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L5(L)(INHIB? OR ANTAG?)
L7	15	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L4 AND L6
=> d	que 160			
L1		SEA FILE=HCAPLUS ABB=ON	PLU=ON	LEUKOTRIENE ANTAGONISTS+OLD/CT
L2	266	SEA FILE=HCAPLUS ABB=ON	PLU=ON	"LEUKOTRIENE RECEPTORS (L)
		LEUKOTRIENE B4"+OLD/CT		· ,
L3	4657	SEA FILE=HCAPLUS ABB=ON	PLU=ON	LEUKOTRIENE B4/CT
L5		SEA FILE=HCAPLUS ABB=ON	PLU=ON	"CYCLOOXYGENASE 2"/CT
L8		SEA FILE=REGISTRY ABB=ON	PLU=ON	
L9	_	SEA FILE=REGISTRY ABB=ON	PLU=ON	
БЭ	3	MEGLUMINE"/CN OR "MELOXI		·
T 1 0	-	SEA FILE=REGISTRY ABB=ON	PLU=ON	
L10	_			•
L11	_	SEA FILE=REGISTRY ABB=ON		· · · · · · ·
L12	_	SEA FILE=REGISTRY ABB=ON		· · · ·
L13		SEA FILE=REGISTRY ABB=ON		
L18		SEA FILE=REGISTRY ABB=ON		•
L19	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	•
L20	2	SEA FILE=REGISTRY ABB=ON	PLU=ON	(EBSELEN/CN OR "EBSELEN

```
SELENOXIDE"/CN)
                    1 SEA FILE=REGISTRY ABB=ON PLU=ON "ETH 615"/CN
L21
                   2 SEA FILE=REGISTRY ABB=ON PLU=ON ("LY 293111"/CN OR "LY
L22
                      293111 SODIUM SALT"/CN)
                   1 SEA FILE=REGISTRY ABB=ON PLU=ON
                                                                     "ONO 4057"/CN
L23
1 SEA FILE=REGISTRY ABB=ON PLU=ON "TMK 688"/CN
L24
L38
L39
L40
L41
L42
L43
              902 SEA FILE=REGISTRY ABB=ON PLU=ON "BAY" OR "BAY-O"

1 SEA FILE=REGISTRY ABB=ON PLU=ON L38 AND L39

1 SEA FILE=REGISTRY ABB=ON PLU=ON "CI 987"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "L 651392"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "LY 210073"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "LY 223982"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "LY 233569"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "LY 255283"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "MK 591"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "MK 886"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "ONO-LB 448"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "PF 5901"/CN

1 SEA FILE=REGISTRY ABB=ON PLU=ON "RG 14893"/CN
               902 SEA FILE=REGISTRY ABB=ON PLU=ON "BAY" OR "BAY-O" OR "BAYO"
L45
L46
L47
L48
L49
L50
                  1 SEA FILE=REGISTRY ABB=ON PLU=ON "RG 14893"/CN
L51
                  1 SEA FILE=REGISTRY ABB=ON PLU=ON "RP 66364"/CN
L52
L53 1 SEA FILE=REGISTRY ABB=ON PLU=ON "RP 69698"/CN
                 1 SEA FILE=REGISTRY ABB=ON PLU=ON "SC 41930"/CN
L54
                1 SEA FILE=REGISTRY ABB=ON PLU=ON "SC 50505"/CN 1 SEA FILE=REGISTRY ABB=ON PLU=ON "SC 51146"/CN
L55
L56
                  1 SEA FILE=REGISTRY ABB=ON PLU=ON "SKF 104493"/CN
L57
                  1 SEA FILE=REGISTRY ABB=ON PLU=ON "TEI 1338"/CN
L58
L59
                  55 SEA FILE=HCAPLUS ABB=ON PLU=ON (L8 OR L9 OR L10 OR L11 OR
                      L12 OR L13) AND (L18 OR L19 OR L20 OR L21 OR L22 OR L23 OR L24
                      OR L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR L32 OR L33
                      OR L34 OR L35 OR L36 OR L37 OR L38 OR L39 OR L40 OR L41 OR L42
                      OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR L51
                      OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58)
                  25 SEA FILE=HCAPLUS ABB=ON PLU=ON L59 AND ((L1 OR L2 OR L3) OR
L60
                      L5)
```

```
=> s 17 or 160
L87 38 L7 OR L60
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=> b medline

FILE 'MEDLINE' ENTERED AT 12:27:27 ON 06 NOV 2002

FILE LAST UPDATED: 5 NOV 2002 (20021105/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

If you received SDI results from MEDLINE on October 8, 2002, these may have included old POPLINE data and in some cases duplicate abstracts. For further information on this situation, please visit NLM at: http://www.nlm.nih.gov/pubs/techbull/so02/so02 popline.html

To correct this problem, CAS will remove the POPLINE records from the MEDLINE file and process the SDI run dated October 8, 2002 again.

Customers who received SDI results via email or hard copy prints on October 8, 2002 will not be charged for this SDI run. If you received your update online and displayed answers, you may request a credit by contacting the CAS Help Desk at 1-800-848-6533 in North America or 614-447-3698 worldwide, or via email to help@cas.org

This file contains CAS Registry Numbers for easy and accurate substance identification.

7101 SEA FILE=MEDLINE ABB=ON

=> d que 168

L61

L76

101	, 101	DELITED HERE TED ON TED ON OTOLOGICAL ENGINEERS
L62	934	SEA FILE=MEDLINE ABB=ON PLU=ON LEUKOTRIENE ANTAGONISTS/CT
L63	276	SEA FILE=MEDLINE ABB=ON PLU=ON "LEUKOTRIENE B4: AI, ANTAGONIS
		TS & INHIBITORS"/CT
L64	332	SEA FILE=MEDLINE ABB=ON PLU=ON "RECEPTORS, LEUKOTRIENE
		B4"/CT
L65	4330	SEA FILE=MEDLINE ABB=ON PLU=ON LEUKOTRIENE B4/CT
L66	276	SEA FILE=MEDLINE ABB=ON PLU=ON L65(L)(AI OR ANTAG? OR
		INHIB?)
L67	176	SEA FILE=MEDLINE ABB=ON PLU=ON L61 AND (L62 OR L63 OR L64 OR
		L65 OR L66)
-L68	18	SEA FILE=MEDLINE ABB=ON PLU=ON L67 AND (COX2 OR COXII OR
		COX(W)(2 OR II) OR CYCLOOXYGENASE(W)(2 OR II))
=> d	que 180	
L73	677	SEA FILE=EMBASE ABB=ON PLU=ON BAYX 1005 OR BAY X 1005 OR
		BAYX1005 OR CBS 25019C OR CBS25019C OR EBSELEN OR ETH615 OR
		ETH 615 OR LY293111 OR LY 293111 OR ONO 4057 OR ONO4057 OR
		TMK688 OR TMK 688 OR BI RM 270 OR BIRM 270 OR BIRM270 OR
		LY213024 OR LY 213024 OR LY264086 OR LY 264086 OR LY292728 OR
		LY 292728 OR ONOLB457
L74	109	SEA FILE=EMBASE ABB=ON PLU=ON ONO LB457 OR 105696 OR PF
		10042 OR PF10042 OR RP66153 OR RP 66153 OR SB201146 OR SB
		201146 OR SB201993 OR SB 201993 OR SC53228 OR SC 53228 OR
		SM15178 OR SM15178 OR WAY121006 OR WAY 121006 OR BY O 8276 OR
		BAY 0 8276 OR BAY 08276 OR BAY08276 OR CI 987 OR CI987 OR
		L651392 OR L 651392
L75	657	SEA FILE=EMBASE ABB=ON PLU=ON LY210073 OR LY 210073 OR
		LY223982 OR LY 223982 OR LY233569 OR LY 233569 OR LY255283 OR
		LY 255283 OR MK591 OR MK 591 OR MK886 OR MK 886 OR ONOLB448 OR
		LB 448 OR PF5901 OR PF 5901 OR RG14893 OR RG 14893 OR RP66364
		OR RP 66364 OR RP69698 OR RP 69698 OR SC41930 OR SC 41930

PLU=ON

CYCLOOXYGENASE INHIBITORS/CT

10 SEA FILE=EMBASE ABB=ON PLU=ON SC50505 OR SC 50505 OR SC51146 OR SC 51146 OR SKF 104493 OR SKF104493 OR TEI1338 OR TEI 1338

L78	1052	SEA FILE=MEDLINE ABB=ON PLU=ON NS398 OR NS 398 OR MELOXICAM
		OR FLOCULIDE OR FLOSULIDE OR MK966 OR MK 966 OR L752860 OR L
		752860 OR L 752 860
L79	907	SEA FILE=MEDLINE ABB=ON PLU=ON (L73 OR L74 OR L75 OR L76)
T80	8	SEA FILE=MEDLINE ABB=ON PLU=ON L78 AND L79

=> s 168 or 180

L88 24 L68 OR L80

=> b embase

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FILE COVERS 1974 TO 31 Oct 2002 (20021031/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

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=> d que	177	
L69		SEA FILE=EMBASE ABB=ON PLU=ON CYCLOOXYGENASE 2 INHIBITOR/CT
L70	143	SEA FILE=EMBASE ABB=ON PLU=ON LEUKOTRIENE B4 RECEPTOR ANTAGONIST/CT
L72	1671	SEA FILE=EMBASE ABB=ON PLU=ON NS398 OR NS 398 OR MELOXICAM OR FLOCULIDE OR FLOSULIDE OR MK966 OR MK 966 OR L752860 OR L 752860 OR L 752 860
L73	677	SEA FILE=EMBASE ABB=ON PLU=ON BAYX 1005 OR BAY X 1005 OR BAYX1005 OR CBS 25019C OR CBS25019C OR EBSELEN OR ETH615 OR ETH 615 OR LY293111 OR LY 293111 OR ONO 4057 OR ONO4057 OR TMK688 OR TMK 688 OR BI RM 270 OR BIRM 270 OR BIRM270 OR LY213024 OR LY 213024 OR LY264086 OR LY 264086 OR LY292728 OR LY 292728 OR ONOLB457
L74	109	SEA FILE=EMBASE ABB=ON PLU=ON ONO LB457 OR 105696 OR PF 10042 OR PF10042 OR RP66153 OR RP 66153 OR SB201146 OR SB 201146 OR SB201993 OR SB 201993 OR SC53228 OR SC 53228 OR SM15178 OR SM15178 OR WAY121006 OR WAY 121006 OR BY O 8276 OR BAY 0 8276 OR BAY 0 8276 OR BAY08276 OR CI 987 OR CI987 OR L651392 OR L 651392
L75	657	SEA FILE=EMBASE ABB=ON PLU=ON LY210073 OR LY 210073 OR LY223982 OR LY 223982 OR LY233569 OR LY 233569 OR LY255283 OR LY 255283 OR MK591 OR MK 591 OR MK886 OR MK 886 OR ONOLB448 OR LB 448 OR PF5901 OR PF 5901 OR RG14893 OR RG 14893 OR RP66364 OR RP 66364 OR RP69698 OR RP 69698 OR SC41930 OR SC 41930
L76	10	SEA FILE=EMBASE ABB=ON PLU=ON SC50505 OR SC 50505 OR SC51146 OR SC 51146 OR SKF 104493 OR SKF104493 OR TEI 1338
L77	23	SEA FILE=EMBASE ABB=ON PLU=ON (L69 OR L72) AND (L70 OR (L73 OR L74 OR L75 OR L76))

=> b drugu FILE 'DRUGU' ENTERED AT 12:28:14 ON 06 NOV 2002 COPYRIGHT (C) 2002 THOMSON DERWENT

FILE LAST UPDATED: 6 NOV 2002 <20021106/UP>
>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

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>>> SDI'S MAY BE RUN WEEKLY OR MONTHLY AS OF JUNE 2001. <<< >>> (WEEKLY IS THE DEFAULT). FOR PRICING INFORMATION <<< >>> SEE HELP COST
```

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

=> (d que 183	
L72	1671	SEA FILE=EMBASE ABB=ON PLU=ON NS398 OR NS 398 OR MELOXICAM
		OR FLOCULIDE OR FLOSULIDE OR MK966 OR MK 966 OR L752860 OR L
		752860 OR L 752 860
L73	677	SEA FILE=EMBASE ABB=ON PLU=ON BAYX 1005 OR BAY X 1005 OR
		BAYX1005 OR CBS 25019C OR CBS25019C OR EBSELEN OR ETH615 OR
		ETH 615 OR LY293111 OR LY 293111 OR ONO 4057 OR ONO4057 OR
		TMK688 OR TMK 688 OR BI RM 270 OR BIRM 270 OR BIRM270 OR
		LY213024 OR LY 213024 OR LY264086 OR LY 264086 OR LY292728 OR
		LY 292728 OR ONOLB457
L74	109	SEA FILE=EMBASE ABB=ON PLU=ON ONO LB457 OR 105696 OR PF
		10042 OR PF10042 OR RP66153 OR RP 66153 OR SB201146 OR SB
		201146 OR SB201993 OR SB 201993 OR SC53228 OR SC 53228 OR
		SM15178 OR SM15178 OR WAY121006 OR WAY 121006 OR BY O 8276 OR BAY 0 8276 OR BAY 08276 OR BAY08276 OR CI 987 OR CI987 OR
		L651392 OR L 651392
T 75	657	SEA FILE=EMBASE ABB=ON PLU=ON LY210073 OR LY 210073 OR
ь/З	657	LY223982 OR LY 223982 OR LY233569 OR LY 233569 OR LY255283 OR
		LY 255283 OR MK591 OR MK 591 OR MK886 OR MK 886 OR ONOLB448 OR
		LB 448 OR PF5901 OR PF 5901 OR RG14893 OR RG 14893 OR RP66364
		OR RP 66364 OR RP69698 OR RP 69698 OR SC41930 OR SC 41930
L76	10	SEA FILE=EMBASE ABB=ON PLU=ON SC50505 OR SC 50505 OR SC51146
		OR SC 51146 OR SKF 104493 OR SKF104493 OR TEI1338 OR TEI 1338
L81	3583	SEA FILE=DRUGU ABB=ON PLU=ON (COX2 OR COXII OR COX(W)(2 OR
		II) OR CYCLOOXYGENASE(W) (2 OR II)) (3A) (ANTAG? OR INHIB?) OR
		L72
L82	1099	SEA FILE=DRUGU ABB=ON PLU=ON LEUKOTRIENE B4(3A)(ANTAG? OR
		INHIB?) OR (L73 OR L74 OR L75 OR L76)

=> b wpix FILE 'WPIX' ENTERED AT 12:28:24 ON 06 NOV 2002 COPYRIGHT (C) 2002 THOMSON DERWENT

L83

FILE LAST UPDATED: 5 NOV 2002 <20021105/UP>
MOST RECENT DERWENT UPDATE: 200271 <200271/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

21 SEA FILE=DRUGU ABB=ON PLU=ON L81 AND L82

- >>> SDI run number 70 for WPI was inadvertently processed with
 a wrong ED/UP date resulting in empty answer sets.
 Therefore SDI 70 will be rerun tonight. <<<</pre>
- >>> SLART (Simultaneous Left and Right Truncation) is now
 available in the /ABEX field. An additional search field
 /BIX is also provided which comprises both /BI and /ABEX <<</pre>
- >>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<
- >>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,

SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
GUIDES, PLEASE VISIT:
 http://www.derwent.com/userguides/dwpi_guide.html <<<</pre>

=> d que	186	
L72	1671	SEA FILE=EMBASE ABB=ON PLU=ON NS398 OR NS 398 OR MELOXICAM
		OR FLOCULIDE OR FLOSULIDE OR MK966 OR MK 966 OR L752860 OR L
		752860 OR L 752 860 .
L73	677	SEA FILE=EMBASE ABB=ON PLU=ON BAYX 1005 OR BAY X 1005 OR
		BAYX1005 OR CBS 25019C OR CBS25019C OR EBSELEN OR ETH615 OR
		ETH 615 OR LY293111 OR LY 293111 OR ONO 4057 OR ONO4057 OR
		TMK688 OR TMK 688 OR BI RM 270 OR BIRM 270 OR BIRM270 OR
		LY213024 OR LY 213024 OR LY264086 OR LY 264086 OR LY292728 OR
		LY 292728 OR ONOLB457
L74	109	SEA FILE=EMBASE ABB=ON PLU=ON ONO LB457 OR 105696 OR PF 10042 OR PF10042 OR RP66153 OR RP 66153 OR SB201146 OR SB
		201146 OR SB201993 OR SB 201993 OR SC53228 OR SC 53228 OR
		201146 OR SB201993 OR SB 201993 OR SC33226 OR SC 33226 OR SM15178 OR SM15178 OR WAY121006 OR WAY 121006 OR BY O 8276 OR
		BAY 0 8276 OR BAY 08276 OR BAY08276 OR CI 987 OR CI987 OR
		L651392 OR L 651392
L75	657	SEA FILE=EMBASE ABB=ON PLU=ON LY210073 OR LY 210073 OR
17.5	007	LY223982 OR LY 223982 OR LY233569 OR LY 233569 OR LY255283 OR
		LY 255283 OR MK591 OR MK 591 OR MK886 OR MK 886 OR ONOLB448 OR
		LB 448 OR PF5901 OR PF 5901 OR RG14893 OR RG 14893 OR RP66364
		OR RP 66364 OR RP69698 OR RP 69698 OR SC41930 OR SC 41930
L76	10	SEA FILE=EMBASE ABB=ON PLU=ON SC50505 OR SC 50505 OR SC51146
		OR SC 51146 OR SKF 104493 OR SKF104493 OR TEI1338 OR TEI 1338
L84	527	SEA FILE=WPIX ABB=ON PLU=ON (COX2 OR COXII OR COX(W) (2 OR
		II) OR CYCLOOXYGENASE(W)(2 OR II))(3A)(ANTAG? OR INHIB?) OR
		L72
L85	154	SEA FILE=WPIX ABB=ON PLU=ON LEUKOTRIENE B4(3A)(ANTAG? OR
	_	INHIB?) OR (L73 OR L74 OR L75 OR L76)
L86	7	SEA FILE=WPIX ABB=ON PLU=ON L84 AND L85

=> dup rem 188 187 183 177 186 FILE 'MEDLINE' ENTERED AT 12:29:07 ON 06 NOV 2002

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FILE 'WPIX' ENTERED AT 12:29:07 ON 06 NOV 2002 COPYRIGHT (C) 2002 THOMSON DERWENT PROCESSING COMPLETED FOR L88

PROCESSING COMPLETED FOR L87 PROCESSING COMPLETED FOR L83 PROCESSING COMPLETED FOR L77 PROCESSING COMPLETED FOR L86 94 DUP REM L88 L87 L83 L77 L86 (19 DUPLICATES REMOVED)

=> s 189 and (cox2 or coxii or cox()(2 or ii) or cyclooxygenase()(2 or ii) or leukotriene b4)

4 FILES SEARCHED...

85 L89 AND (COX2 OR COXII OR COX(W)(2 OR II) OR CYCLOOXYGENASE(W)(2 OR II) OR LEUKOTRIENE B4)

=> s 190 and (antag? or inhib?) 85 L90 AND (ANTAG? OR INHIB?)

=> s 189 and (cox2 or coxii or cox()(2 or ii) or cyclooxygenase()(2 or ii)) and leukotriene

4 FILES SEARCHED...

53 L89 AND (COX2 OR COXII OR COX(W)(2 OR II) OR CYCLOOXYGENASE(W)(2 OR II)) AND LEUKOTRIENE

=> d ibib ab 1-53

L92 ANSWER 1 OF 53 MEDLINE

ACCESSION NUMBER: 2002635732 IN-PROCESS 22282061 PubMed ID: 12392782 DOCUMENT NUMBER:

Cyclooxygenase and 5-lipoxygenase inhibitors protect TITLE:

against mononuclear phagocyte neurotoxicity.

Klegeris Andis; McGeer Patrick L AUTHOR:

Kinsmen Laboratory of Neurological Research, University of CORPORATE SOURCE:

British Columbia, BC, V6T 123, Vancouver, Canada.

NEUROBIOLOGY OF AGING, (2002 Sep) 23 (5) 787. Journal code: 8100437. ISSN: 0197-4580. SOURCE:

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

IN-PROCESS; NONINDEXED; Priority Journals FILE SEGMENT:

Entered STN: 20021024 ENTRY DATE:

Last Updated on STN: 20021024

Neuroinflammation and oxidative stress are believed to be contributing factors to neurodegeneration in normal aging, as well as in age-related neurological disorders. Reactive microglia are found in increased numbers in aging brain and are prominently associated with lesions in such age-related degenerative conditions as Alzheimer's disease (AD), Parkinson's disease (PD) and amyotrophic lateral sclerosis (ALS). In vitro, stimulated microglia or microglial-like cells secrete neurotoxic materials and are generators of free radicals through their respiratory burst system. Agents that suppress microglial activation are therefore candidates for neuroprotection. We have developed quantitative in vitro assays for measuring neurotoxicity of microglia or other mononuclear phagocytes. Neuronal like SH-SY5Y cells are cultured in supernatants from activated cells of the human monocytic THP-1 line and their survival is followed. Respiratory burst is directly measured on the activated cells. We tested inhibitors of the cyclooxygenase (COX) or the 5-lipoxygenase (5-LOX) pathways as possible neuroprotective agents. The COX pathway generates inflammatory prostaglandins, while the 5-LOX pathway generates inflammatory leukotrienes. We found that inhibitors of both these pathways suppressed neurotoxicity in a dose-dependent fashion. They

included the COX-1 inhibitor indomethacin; the COX-2 inhibitor NS-398; the mixed COX-1/COX-2 inhibitor ibuprofen; the nitric oxide (NO) derivatives of indomethacin, ibuprofen and flurbiprofen; the 5-LOX inhibitor REV 5901; and the 5-LOX activating protein (FLAP) inhibitor MK-886. The FLAP inhibitor also reduced respiratory burst activity in a more potent manner than indomethacin. Combinations of COX and 5-LOX inhibitors were more effective than single inhibitors. The data suggest that both COX inhibitors and 5-LOX inhibitors may be neuroprotective in vivo by suppressing toxic actions of microglia/macrophages, and that combinations of the two might have greater therapeutic potential than single inhibitors of either class.

L92 ANSWER 2 OF 53 MEDLINE

ACCESSION NUMBER: 2002377888 MEDLINE

DOCUMENT NUMBER: 22119204 PubMed ID: 12124864

TITLE: Study of the role of leukotriene B()4 in abnormal

function of human subchondral osteoarthritis osteoblasts: effects of cyclooxygenase and/or 5-lipoxygenase inhibition.

AUTHOR: Paredes Yosabeth; Massicotte Frederic; Pelletier

Jean-Pierre; Martel-Pelletier Johanne; Laufer Stefan;

Lajeunesse Daniel

CORPORATE SOURCE: Centre Hospitalier de l'Universite de Montreal, Hopital

Notre-Dame, Montreal, Quebec, Canada.

SOURCE: ARTHRITIS AND RHEUMATISM, (2002 Jul) 46 (7) 1804-12.

Journal code: 0370605. ISSN: 0004-3591.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200208

ENTRY DATE: Entered STN: 20020719

licofelone, NS-398, or BayX-1005.

Last Updated on STN: 20020806 Entered Medline: 20020805

AB OBJECTIVE: To compare the effect of licofelone, NS-398

(an inhibitor of cyclooxygenase 2 [COX-2]), and BayX-1005 (an inhibitor of

5-lipoxygenase activating protein) on the production of leukotriene B(4) (LTB(4)) and prostaglandin E(2) (PGE(2)), and on cell biomarkers by human osteoarthritis (OA) subchondral osteoblasts. METHODS: Primary in vitro osteoblasts were prepared from subchondral bone specimens obtained from OA patients and autopsy subjects. LTB(4) and PGE(2) levels were measured by enzyme-linked immunosorbent assay in conditioned media of osteoblasts incubated in the presence or absence of

The effect of these drugs or of the addition of LTB(4) on alkaline phosphatase (AP) activity and osteocalcin release by OA and normal osteoblasts was determined. The presence of LTB(4) receptors in normal and OA osteoblasts was evaluated by Western blot analysis. RESULTS: OA osteoblasts produced variable levels of PGE(2) and LTB(4) compared with normal osteoblasts. Licofelone, at the maximal dose used, inhibited production of PGE(2) and LTB(4) by OA osteoblasts by a mean +/- SEM of 61.2 +/- 6.4% and 67.0 +/- 7.6%, respectively. NS-398 reduced PGE(2) production by 75.8 +/- 5.3%. BayX-1005

inhibited LTB(4) production by 75.8 +/- 5.3%. Bayx-1005 inhibited LTB(4) production in OA osteoblasts by 38.7 +/- 14.5% and marginally affected PGE(2) levels (reduction of 14.8 +/- 5.3%). Licofelone dose-dependently stimulated 1,25-dihydroxyvitamin D-induced AP activity while inhibiting osteocalcin release. Bayx-1005 partly

reproduced these effects, but NS-398 failed to affect them. LTB(4) dose-dependently inhibited AP activity in OA osteoblasts, while its effect on osteocalcin depended on endogenous LTB(4) levels in these cells. In normal osteoblasts, LTB(4) dose-dependently stimulated osteocalcin, whereas it failed to influence AP. LTB(4) receptors BLT1 and BLT2 were present in normal and OA osteoblasts. CONCLUSION: Licofelone inhibits the production of PGE(2) and LTB(4). Selective effects of licofelone on AP and osteocalcin occur via its role on LTB(4) production. Because LTB(4) can modify cell biomarkers in OA and normal osteoblasts, our results suggest licofelone could modify abnormal bone remodeling in OA.

L92 ANSWER 3 OF 53 MEDLINE

ACCESSION NUMBER: 2002176008 MEDLINE

DOCUMENT NUMBER: 21905240 PubMed ID: 11908571

TITLE: Synthesis of interleukin 1beta, tumor necrosis

factor-alpha, and interstitial collagenase (MMP-1) is eicosanoid dependent in human osteoarthritis synovial membrane explants: interactions with antiinflammatory

cytokines.

AUTHOR: He Wendy; Pelletier Jean-Pierre; Martel-Pelletier Johanne;

Laufer Stefan; Di Battista John A

CORPORATE SOURCE: Osteoarthritis Research Unit, Hopital Notre-Dame, Centre

Hospitalier de l'Universite de Montreal, Quebec, Canada.

SOURCE: JOURNAL OF RHEUMATOLOGY, (2002 Mar) 29 (3) 546-53.

Journal code: 7501984. ISSN: 0315-162X.

PUB. COUNTRY: Canada

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200209

ENTRY DATE: Entered STN: 20020324

Last Updated on STN: 20021008 Entered Medline: 20020924

AB OBJECTIVE: To determine the level of leukotriene B4 (LTB4) synthesized and released by synovium of patients with osteoarthritis (OA), and to study the role of lipoxygenase (LO)/cyclooxygenase (COX) products on proinflammatory cytokine and interstitial collagenase (MMP-1) synthesis. METHODS: Human OA synovial explants were cultured in the presence of lipopolysaccharide (L) and the ionophores ionomycin (I) and thapsigargin (T) (LIT) for 72 h at 37 degrees C, and LTB4 released into the culture medium was measured in the absence or presence of a

COX-2-specific inhibitor, NS-398, or

the 5-LO activating protein inhibitor Bay-x-

1005. Increasing concentrations of LTB4 (10(-9)) to 10(-6) M) were incubated with explants for 24 h at 37 degrees C, and interleukin 1beta (IL-1beta) and tumor necrosis factor-alpha (TNF-alpha) in the conditioned medium were quantitated by ELISA. The effect of endogenous eicosanoids on basal and induced levels of IL-1beta, TNF-alpha, and MMP-1 synthesis was examined by incubating explants in the presence of NS-

398 and Bay-x-1005. The effect of

antiinflammatory cytokines rhIL-4, IL-10, and IL-13 on basal and LTB4 dependent stimulation of IL-1beta/TNF-alpha synthesis was studied under titration conditions. RESULTS: Physiologically relevant concentrations (10(-10) to 10(-9) mol/l) of LTB4 were produced in the presence of LIT.

Bay-x-1005 abrogated LTB4 release, while

NS-398 was without effect. LTB4 stimulated IL-1beta and

TNF-alpha synthesis with an EC50 of 190 \pm 35 and 45 \pm 9 nmol/l,

respectively. Significant concentrations of IL-lbeta and TNF-alpha were released (100-200 and 500-600 pg/ml, respectively). Basal and LIT induced IL-1beta and TNF-alpha production were inhibited by Bayx-1005 in a dose dependent manner, while the addition of NS-398 caused a potent stimulatory effect. The preferential cox-2 inhibitor also induced MMP-1 synthesis in a manner essentially identical to the proinflammatory cytokines. The antiinflammatory cytokine IL-4 blocked LTB4 dependent stimulation of IL-1beta and TNF-alpha synthesis. In contrast, IL-10 markedly stimulated both cytokines when incubated alone or in the presence of LTB4 where the effect was additive. CONCLUSION: Endogenous and locally produced eicosanoids regulate proinflammatory cytokine and MMP-1 synthesis under basal and stimulated conditions in vitro, with leukotrienes and prostaglandins having opposite effects in general. The clinical use of antiinflammatory drugs that inhibit eicosanoid synthesis requires an appreciation of their relative capacity to inhibit LO/COX in order to predict their effect on the synthesis of proinflammatory cytokines and matrix metalloproteases. IL-10 stimulated proinflammatory cytokine synthesis in our ex vivo culture system.

L92 ANSWER 4 OF 53 MEDLINE

ACCESSION NUMBER: 2001444320 MEDLINE

DOCUMENT NUMBER: 21383016 PubMed ID: 11490357

TITLE: Prostaglandin E2 receptors EP2 and EP4 are down-regulated

in human mononuclear cells after injury.

AUTHOR: Strong V E; Winter J; Yan Z; Smyth G P; Mestre J R; Maddali

S; Schaefer P A; Yurt R W; Stapleton P P; Daly J M

CORPORATE SOURCE: Department of Surgery, New York Presbyterian Hospital-Weill

Medical College of Cornell Univerity, New York, NY 10021,

USA.

CONTRACT NUMBER: 1RO1 DK50201-0 (NIDDK)

T32 GM08466-06 (NIGMS)

SOURCE: SURGERY, (2001 Aug) 130 (2) 249-55.

Journal code: 0417347. ISSN: 0039-6060.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200109

ENTRY DATE: Entered STN: 20010813

Last Updated on STN: 20010910 Entered Medline: 20010906

AB BACKGROUND: Recent characterization of prostaglandin receptor subtypes shows that each is critical to cellular functions and operates through separate signaling pathways that may explain differing effects of prostanoids. This study aimed to determine whether prostaglandin receptors EP2 and EP4 are modulated after injury and to evaluate the effect of prostaglandin E(2) (PGE(2)) addition and blockade on EP receptor expression. METHODS: Peripheral blood mononuclear cells (PBMCs) isolated from 10 patients sustaining fracture or burn injury and 10 control subjects were stimulated with lipopolysaccharide +/- NS-398, an inhibitor of PGE(2) production. Samples were evaluated for production of PGE(2), tumor necrosis factor--alpha, and leukotriene B(4) as well as mRNA expression of EP receptors and cox-2. EP receptor expression was also evaluated after treating control PBMCs with PGE(2). RESULTS: PBMCs from injured patients exhibited significant increases in PGE(2) production and cox-2 mRNA compared with control subjects, and these increases were inhibited by NS-398. In contrast, EP2

and EP4 receptors were markedly down-regulated after injury and NS-398 restored expression to control levels. Decreased EP2 and EP4 receptor expression after injury was replicated by coincubation of PBMCs with PGE(2). CONCLUSIONS: Specific PGE(2) receptors are down-regulated after injury and NS-398 reverses this response. Furthermore, PGE(2) mediates EP2 and EP4 down-regulation. These data suggest that specific EP receptor subtypes may provide critical targets for augmenting the immune response after injury in humans.

L92 ANSWER 5 OF 53 MEDLINE

ACCESSION NUMBER: 2001409228 MEDLINE

DOCUMENT NUMBER: 21180744 PubMed ID: 11286400

TITLE: The anti-inflammatory effect of FR188582, a highly

selective inhibitor of cyclooxygenase-2

, with an ulcerogenic sparing effect in rats.

AUTHOR: Ochi T; Yamane-Sugiyama A; Ohkubo Y; Sakane K; Tanaka H

CORPORATE SOURCE: Department of Immunology and Inflammation, Fujisawa

Pharmaceutical Co., Ltd., Osaka, Japan..

takehiro ochi@po.fujisawa.co.jp

SOURCE: JAPANESE JOURNAL OF PHARMACOLOGY, (2001 Feb) 85 (2) 175-82.

Journal code: 2983305R. ISSN: 0021-5198.

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200107

ENTRY DATE: Entered STN: 20010723

Last Updated on STN: 20010723 Entered Medline: 20010719

The anti-inflammatory and ulcerogenic effects of FR188582, AB 3-chloro-5-[4-(methylsulfonyl) phenyl]-1-phenyl-1H-pyrazole, were investigated. In a recombinant human cyclooxygenase (COX) enzyme activity, FR188582 inhibited COX-2 with an IC50 value of 0.017 microM, and the inhibition of prostaglandin (PG) E2 formation by FR188582 was over 6000 times more selective for cox-2 than COX-1. Oral administration of FR188582 dose-dependently inhibited adjuvant arthritis. This effect was threefold more potent than that of indomethacin. FR188582 and indomethacin dose-dependently suppressed the formation of immunoreactive PGE2, but not immunoreactive leukotriene (LT) B4, in arthritic paw. Unlike indomethacin, FR188582 did not induce visible gastric lesions in rats at doses up to 32 mg/kg, p.o. Furthermore, FR188582 did not inhibit the level of immunoreactive PGE2 and immunoreactive 6-keto PGFlalpha in rat gastric mucosa. These results suggest that FR188582, a highly selective

COX-2 inhibitor, has a potent anti-inflammatory effect

mediated by inhibition of PGE2 in inflamed tissues. The safety profile of FR188582 appears to be improved over the safety profile of indomethacin.

L92 ANSWER 6 OF 53 MEDLINE

ACCESSION NUMBER: 2001277260 MEDLINE

DOCUMENT NUMBER: 21262279 PubMed ID: 11368536

TITLE: NS-398 treatment after trauma modifies NF-kappaB activation

and improves survival.

AUTHOR: Mack Strong V E; Mackrell P J; Concannon E M; Mestre J R;

Smyth G P; Schaefer P A; Stapleton P P; Daly J M

CORPORATE SOURCE: Department of Surgery, New York Presbyterian Hospital-Weill

Medical College of Cornell University, New York, New York

10021, USA.. vem9002@nyp.org

SOURCE:

JOURNAL OF SURGICAL RESEARCH, (2001 Jun 1) 98 (1) 40-6.

Journal code: 0376340. ISSN: 0022-4804.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200106

ENTRY DATE:

Entered STN: 20010702

Last Updated on STN: 20010702

Entered Medline: 20010628

Prostaglandin E(2) (PGE(2)) production after trauma contributes to immune AΒ alterations that increase susceptibility to infections. We hypothesize that blocking PGE(2) with NS-398, a selective cox-2 inhibitor, will modulate this response and improve outcome. This study evaluated the effect of NS-398 given over 7 days on proinflammatory cytokines, intracellular signaling, and survival after a septic challenge.

Balb/C mice (n = 8/group) were given 10 mg/kg NS-398 intraperitoneally over 7 days, starting after anesthesia or trauma (femur fracture + 40% hemorrhage). Four groups, anesthesia + vehicle (C), anesthesia + NS-398 (CN), trauma + vehicle (T), or trauma + NS-398 (TN), were studied. On Day 7 after trauma, mice were sacrificed, serum was collected, and splenic macrophages were evaluated for PGE(2), LTB(4), IL-6, TNF-alpha, and NO

production. Additionally, macrophage cox-2 mRNA,

IkappaB-alpha, and NF-kappaB were evaluated. In a separate study, mice (n = 10-11/group) were traumatized and given NS-398 over 7 days, and then cecal ligation and puncture (CLP) were performed. Mice were then followed for survival over 10 days (via log-rank test). NS-398 treatment of injured mice decreased PGE(2) production compared to T (3.9 \pm 0.3 vs 3.1 \pm 0.4 pg/microg protein), and significantly decreased IL-6, NO, and TNF-alpha

production. NS-398 treatment also attenuated cox-2

mRNA levels and NF-kappaB activation. These cellular events correlate with a significant survival advantage in TN versus T mice after CLP. These data suggest that a specific COX-2 inhibitor not only

suppresses PGE(2), but normalizes proinflammatory cytokines after trauma through changes that may partly be mediated via transcriptional events. This correlates with significantly increased survival in TN mice given a septic challenge and suggests that COX-2 inhibitors

contribute to modulating the inflammatory response and improving survival after trauma.

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L92 ANSWER 7 OF 53

MEDLINE

2001166187 MEDLINE

ACCESSION NUMBER: DOCUMENT NUMBER:

21164930 PubMed ID: 11264253

TITLE:

Cyclo-oxygenase and lipoxygenase pathways in mast cell dependent-neurogenic inflammation induced by electrical

stimulation of the rat saphenous nerve.

AUTHOR:

Le Filliatre G; Sayah S; Latournerie V; Renaud J F; Finet

M; Hanf R

CORPORATE SOURCE:

Service de Pharmacologie, Laboratoire Innothera, 7 - 9 av Francois Vincent Raspail, BP 12, 94111, Arcueil Cedex,

France.. gael.le.filliatre@innothera.com

SOURCE:

BRITISH JOURNAL OF PHARMACOLOGY, (2001 Apr) 132 (7) 1581-9.

Journal code: 7502536. ISSN: 0007-1188.

PUB. COUNTRY:

England: United Kingdom

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200105

ENTRY DATE:

Entered STN: 20010521

Last Updated on STN: 20010521 Entered Medline: 20010517

1. We investigated the role of arachidonic acid metabolism and assessed AB the participation of mast cells and leukocytes in neurogenic inflammation in rat paw skin. We compared the effect of lipoxygenase (LOX) and cyclo-oxygenase (COX) inhibitors on oedema induced by saphenous nerve stimulation, substance P (SP), and compound 48/80. 2. Intravenous (i.v.) pre-treatment with a dual COX/LOX inhibitor (RWJ 63556), a dual LOX inhibitor/cysteinyl-leukotriene (CysLt) receptor antagonist (Rev 5901), a LOX inhibitor (AA 861), a five-lipoxygenase activating factor (FLAP) inhibitor (MK 886), or a glutathione S-transferase inhibitor (ethacrynic acid) significantly inhibited (40 to 60%) the development of neurogenic oedema, but did not affect cutaneous blood flow. Intradermal (i.d.) injection of LOX inhibitors reduced SP-induced oedema (up to 50% for RWJ 63556 and MK 886), whereas ethacrynic acid had a potentiating effect. 3. Indomethacin and rofecoxib, a highly selective COX-2 inhibitor, did not affect neurogenic and SP-induced oedema. Surprisingly, the structurally related cox-2 inhibitors, NS 398 and nimesulide, significantly reduced both neurogenic and SP-induced oedema (70% and 42% for neurogenic oedema, respectively; 49% and 46% for SP-induced oedema, respectively). 4. cox-2 mRNA was undetectable in saphenous nerves and paw skin biopsy samples, before and after saphenous nerve stimulation. 5. A mast cell stabilizer, cromolyn, and a H(1) receptor antagonist, mepyramine, significantly inhibited neurogenic (51% and 43%, respectively) and SP-induced oedema (67% and 63%, respectively). 6. The co-injection of LOX inhibitors and compound 48/80 did not alter the effects of compound 48/80. Conversely, ethacrynic acid had a significant potentiating effect. The pharmacological profile of the effect of COX inhibitors on compound 48/80-induced oedema was similar to that of neurogenic and SP-induced oedema. 7. The polysaccharide, fucoidan (an inhibitor of leukocyte rolling) did not affect neurogenic or SP-induced oedema. 8. Thus, (i) SP-induced leukotriene synthesis is involved in the development of neurogenic oedema in rat paw skin; (ii) this leukotriene-mediated plasma extravasation might be independent of mast cell activation and/or of the adhesion of leukocytes to the endothelium; (iii) COX did not appear to play a significant role in this process.

L92 ANSWER 8 OF 53 MEDLINE

ACCESSION NUMBER: 2001108965 MEDLINE

PubMed ID: 11137876 DOCUMENT NUMBER: 21065672

Protective role of cyclooxygenase inhibitors in the adverse TITLE:

action of passive cigarette smoking on the initiation of

experimental colitis in rats.

Guo X; Liu E S; Ko J K; Wong B C; Ye Y; Lam S; Cho C AUTHOR:

Department of Pharmacology, Faculty of Medicine, The CORPORATE SOURCE:

University of Hong Kong, 1/F, Li Shu Fan Bldg., 5 Sassoon

Road, SAR, Hong Kong, People's Republic of China.

SOURCE: EUROPEAN JOURNAL OF PHARMACOLOGY, (2001 Jan 5) 411 (1-2)

193-203.

Journal code: 1254354. ISSN: 0014-2999.

PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

English LANGUAGE:

FILE SEGMENT: Priority Journals ENTRY MONTH:

200102

ENTRY DATE:

Entered STN: 20010322

Last Updated on STN: 20010322 Entered Medline: 20010208

Clinical and experimental findings had indicated that cigarette smoke AB exposure, and cyclooxygenase-2, are strongly associated with inflammatory bowel disease. The present study aimed to evaluate the role of cyclooxygenase-2 in the pathogenesis of experimental inflammatory bowel disease as well as in the adverse action of cigarette-smoke exposure. Rats were pretreated with different cyclooxygenase-2 inhibitors (indomethacin, nimesulide, or SC-236 (4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1Hpyrazol-1-yl]benzenesulfonamide)) along with cigarette-smoke exposure before 2,4,6-trinitrobenzenesulfonic acid-enema. Results indicated that pretreatment with cyclooxygenase-2 inhibitors not only protected against 2,4,6-trinitrobenzenesulfonic acid-induced inflammatory bowel disease, but also attenuated the potentiating effect of cigarette-smoke exposure on colonic damage. Furthermore, the colonic cyclooxygenase-2 protein and mRNA expression was markedly induced by 2,4,6-trinitrobenzenesulfonic acid-enema, and it was potentiated further by cigarette-smoke exposure, while the cyclooxygenase-1 expression was not changed. The present study suggests that the highly induced cyclooxygenase-2 expression not only plays a pathogenic role in 2,4,6-trinitrobenzenesulfonic acid-induced inflammatory bowel disease, but also contributes to the

L92 ANSWER 9 OF 53 MEDLINE

ACCESSION NUMBER:

2000281736 MEDLINE

DOCUMENT NUMBER:

20281736 PubMed ID: 10821716

adverse action of cigarette-smoke exposure on this disorder.

TITLE:

Novel antiarthritic agents with 1,2-isothiazolidine-1,1-dioxide (gamma-sultam) skeleton: cytokine suppressive dual

inhibitors of cyclooxygenase-2 and

5-lipoxygenase.

AUTHOR:

Tnagaki M; Tsuri T; Jyoyama H; Ono T; Yamada K; Kobayashi
M; Hori Y; Arimura A; Yasui K; Ohno K; Kakudo S; Koizumi K;

Suzuki R; Kawai S; Kato M; Matsumoto S

CORPORATE SOURCE:

Shionogi Research Laboratories, Shionogi & Co., Ltd.,

Fukushima-ku, Osaka 553-0002, Japan.

SOURCE:

JOURNAL OF MEDICINAL CHEMISTRY, (2000 May 18) 43 (10)

2040-8.

Journal code: 9716531. ISSN: 0022-2623.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200006

ENTRY DATE:

Entered STN: 20000706

Last Updated on STN: 20000706 Entered Medline: 20000629

AB Various 1,2-isothiazolidine-1,1-dioxide (gamma-sultam) derivatives containing an antioxidant moiety, 2,6-di-tert-butylphenol substituent, were prepared. Some compounds, which have a lower alkyl group at the 2-position of the gamma-sultam skeleton, showed potent inhibitory effects on both cyclooxygenase (COX)-2 and 5-lipoxygenase (5-LO), as well as production of interleukin (IL)-1 in in vitro assays. They also proved to be effective in several animal arthritic models without any ulcerogenic activities. Among these compounds,

(E)-(5)-(3,5-di-tert-butyl-4-hydroxybenzylidene)-2-ethyl-1, 2-isothiazolidine-1,1-dioxide (S-2474) was selected as an antiarthritic drug candidate and is now under clinical trials. The structure-activity relationships (SAR) examined and some pharmacological evaluations are described.

L92 ANSWER 10 OF 53 MEDLINE

2000162186 ACCESSION NUMBER: MEDLINE

20162186 PubMed ID: 10698360 DOCUMENT NUMBER:

Effects of some isoxazolpyrimidine derivatives on nitric TITLE:

oxide and eicosanoid biosynthesis.

Vidal A; Ferrandiz M L; Ubeda A; Guillen I; Riguera R; AUTHOR:

Quintela J M; Peinador C; Moreira M J; Alcaraz M J

Department of Pharmacology, University of Valencia, Spain. CORPORATE SOURCE:

LIFE SCIENCES, (2000 Jan 21) 66 (9) PL125-31. SOURCE:

Journal code: 0375521. ISSN: 0024-3205.

ENGLAND: United Kingdom PUB. COUNTRY:

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200003

ENTRY DATE: Entered STN: 20000327

> Last Updated on STN: 20000327 Entered Medline: 20000316

The inhibitory effect of some isoxazolpyrimidine derivatives on iNOS and AB COX-2 endotoxin induction in mouse peritoneal macrophages has been studied. Three of these compounds inhibited nitrite and PGE2 accumulation in a concentration dependent-manner at microM range. None of these active compounds affected iNOS, cox-2, COX-1 or PLA2 activities, although some reduced iNOS or COX-2 expression. Besides, no effect was observed on human neutrophil inflammatory responses (LTB4 biosynthesis and superoxide or elastase release). Active compounds were assayed by oral administration in the mouse air pouch model, where they inhibited nitrite accumulation without

L92 ANSWER 11 OF 53 MEDLINE

2000132598 ACCESSION NUMBER: MEDLINE

PubMed ID: 10669114 DOCUMENT NUMBER: 20132598

TITLE: Eicosanoid release in the endotoxin-primed isolated perfused rat lung and its pharmacological modification.

AUTHOR: Amann R; Schuligoi R; Peskar B A

affecting PGE2 levels or leukocyte migration.

CORPORATE SOURCE: Department of Experimental and Clinical Pharmacology,

University of Graz, Austria.. rainer.amann@kfunigraz.ac.at

SOURCE:

INFLAMMATION RESEARCH, (1999 Dec) 48 (12) 632-6.

Journal code: 9508160. ISSN: 1023-3830.

Switzerland PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200003

Entered STN: 20000320 ENTRY DATE:

> Last Updated on STN: 20000320 Entered Medline: 20000306

OBJECTIVE: Recent observations have demonstrated a central role of the AΒ

"inducible" isoform of the cyclooxygenase (COX), COX-2

, in the rat lung. Therefore, the reported capacity of selective

COX-2 inhibitors to potentiate the formation of

leukotriene (LT) B4 may raise concern about pro-inflammatory side effects of such drugs in the respiratory system. The present study was aimed at determining the effects of the cox-2 inhibitor NS-398 on the release of COX and 5-lipoxygenase (LOX) metabolites of arachidonic acid in isolated perfused lungs obtained from endotoxin-treated rats before and after stimulation with the leukocyte secretagogue N-formyl-methionyl-leucyl-phenylalanine (FMLP). METHODS: Two hours after rats had received endotoxin i.v., the lung was dissected and perfused via the pulmonary artery with physiological salt solution. After an equilibration period of 20 min the outflow was collected (5-min fractions). In the respective treatment groups, indomethacin, NS-398, or the 5-LOX inhibitor MK886 were present throughout the experiment, while FMLP was added to the perfusate during a single 5-min period. The concentration of eicosanoids in the outflow was determined by radioimmunoassay. RESULTS: Endotoxin treatment of rats resulted in increased expression of COX-2 mRNA in lung tissue, and an elevated basal release of the prostaglandin (PG)I2 metabolite 6-keto PGFlalpha, without a detectable increase of leukotriene (LT) formation. In-vitro exposure to FMLP stimulated LT and prostanoid release, which was significantly enhanced in endotoxin-primed lungs, and was suppressed by the 5-LOX inhibitor MK-886 (3 microM) and the COX-inhibitor indomethacin (5 microM), respectively. Either compound showed selective inhibition of the respective pathway of arachidonic acid metabolism. In endotoxin-primed lungs, the cox-2 inhibitor NS-398 (0.3-1.0 microM) depressed basal as well as FMLP-stimulated release of 6-keto PGFlalpha, but did not cause a significant increase of LTB4 or cysteinyl-LT release. CONCLUSIONS: These results suggest that FMLP, presumably acting on inflammatory cells trapped in the pulmonary circulation of endotoxin treated rats, induced prostanoid formation mainly via the COX-2 pathway, and that its inhibition by NS-398 had no detectable potentiating effect on LTB4 or cysteinyl-LT biosynthesis.

L92 ANSWER 12 OF 53 MEDLINE

ACCESSION NUMBER: 1999413014 MEDLINE

DOCUMENT NUMBER: 99413014 PubMed ID: 10483516

DOCUMENT NUMBER: 99413014 Fubmed 1D. 10403310

TITLE: New insights in the bronchodilatory and anti-inflammatory

mechanisms of action of theophylline.

AUTHOR: Juergens U R; Degenhardt V; Stober M; Vetter H

CORPORATE SOURCE: Department of Pulmonary Diseases, Medical Policlinic,

University Hospital, Bonn, Germany.

SOURCE: ARZNEIMITTEL-FORSCHUNG, (1999 Aug) 49 (8) 694-8.

Journal code: 0372660. ISSN: 0004-4172.

GERMANY: Germany, Federal Republic of

PUB. COUNTRY: GERMANY: Germany
DOCUMENT TYPE: (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199910

ENTRY DATE: Entered STN: 19991014

Last Updated on STN: 19991014 Entered Medline: 19991007

AB Phosphodiesterase (PDE) inhibition and adenosine antagonism have been identified as important underlying mechanisms for the bronchodilating and anti-inflammatory action of theophylline (CAS 58-55-9). The aim of the present study was to determine the effects of PDE inhibition by theophylline on cAMP and arachidonic acid (AA) metabolism, namely

leukotriene B4 (LTB4) and prostaglandin E2 (PGE2) production, in cultured monocytes in vitro. Monocytes obtained from healthy non-smoking subjects were incubated in adherence at 37 degrees C for 4 h in the presence of theophylline (0.18, 1.8 and 18 micrograms/ml, respectively) and stimulated with LPS (10 micrograms/ml). LTB4, PGE2 and cAMP were measured in the same culture supernatants by direct enzyme immunoassay. LPS-stimulated generation of cAMP increased significantly (+162%) in the presence of theophylline (18 micrograms/ml); production of LTB4 was suppressed (-42%) compared to the baseline, whereas PGE2 production increased significantly (+39%). Production of cAMP correlated with increased PGE2 production (r = 0.73, p = 0.025) and with suppression of LTB4 (r = 0.67, p = 0.016). These effects were mimicked by cell permeant nucleotides, such as dibutyryl-cAMP but not by dibutyryl-cGMP and could be abolished by ibuprofen. These results provide the first evidence that the clinical efficacy of theophylline may result from inhibition of leukotriene production and its capacity to stimulate PGE2 production. The underlying mechanism is suggested as feedback regulatory induction of cox-2 by a prostaglandin driven cAMP-mediated process.

L92 ANSWER 13 OF 53 MEDLINE

ACCESSION NUMBER: 1999340153 MEDLINE

DOCUMENT NUMBER: 99340153 PubMed ID: 10411562

TITLE: Rofecoxib [Vioxx, MK-0966; 4-(4'-methylsulfonylphenyl)-3-

phenyl-2-(5H)-furanone]: a potent and orally active

cyclooxygenase-2 inhibitor.

Pharmacological and biochemical profiles.

AUTHOR: Chan C C; Boyce S; Brideau C; Charleson S; Cromlish W;

Ethier D; Evans J; Ford-Hutchinson A W; Forrest M J; Gauthier J Y; Gordon R; Gresser M; Guay J; Kargman S; Kennedy B; Leblanc Y; Leger S; Mancini J; O'Neill G P; Ouellet M; Patrick D; Percival M D; Perrier H; Prasit P;

Rodger I; +

CORPORATE SOURCE: Departments of Pharmacology, Biochemistry and Molecular

Biology, and Medicinal Chemistry, Merck Frosst Centre for

Therapeutic Research, Kirkland, Quebec, Canada...

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SOURCE: JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS,

(1999 Aug) 290 (2) 551-60.

Journal code: 0376362. ISSN: 0022-3565.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199908

ENTRY DATE: Entered STN: 19990827

Last Updated on STN: 19990827 Entered Medline: 19990818

AB The discoveries that cyclooxygenase (cox)-2 is an

inducible form of COX involved in inflammation and that COX-1 is the major isoform responsible for the production of prostaglandins (PGs) in the gastrointestinal tract have provided a rationale for the development of specific COX-2 inhibitors as a new class of

anti-inflammatory agents with improved gastrointestinal tolerability. In

the present study, the preclinical pharmacological and biochemical profiles of rofecoxib [Vioxx, also known as MK-0966, 4-(4'-

methylsulfonylphenyl)-3-phenyl-2-(5H)-furanone], an orally active

COX-2 inhibitor, are described. Rofecoxib is a potent

inhibitor of the COX-2-dependent production of PGE(2) in human osteosarcoma cells (IC(50) = 26 + /- 10 nM) and Chinese hamster ovary cells expressing human cox-2 (IC(50) = 18 +/- 7 nM) with a 1000-fold selectivity for the inhibition of COX-2 compared with the inhibition of COX-1 activity (IC(50) > 50)microM in U937 cells and IC(50) > 15 microM in Chinese hamster ovary cells expressing human COX-1). Rofecoxib is a time-dependent inhibitor of purified human recombinant cox-2 (IC(50) = 0.34 microM) but caused inhibition of purified human COX-1 in a non-time-dependent manner that could only be observed at a very low substrate concentration (IC(50) = 26 microM at 0.1 microM arachidonic acid concentration). In an in vitro human whole blood assay, rofecoxib selectively inhibited lipopolysaccharide-induced, COX-2 -derived PGE(2) synthesis with an IC(50) value of 0.53 +/- 0.02 microM compared with an IC(50) value of 18.8 +/- 0.9 microM for the inhibition of COX-1-derived thromboxane B(2) synthesis after blood coagulation. Using the ratio of the COX-1 IC(50) values over the cox-2 IC(50) values in the human whole blood assay, selectivity ratios for the inhibition of cox-2 of 36, 6.6, 2, 3, and 0.4 were obtained for rofecoxib, celecoxib, meloxicam, diclofenac, and indomethacin, respectively. In several in vivo rodent models, rofecoxib is a potent inhibitor of carrageenan-induced paw edema (ID(50) = 1.5 mg/kg), carrageenan-induced paw hyperalgesia (ID(50) = 1.0 mg/kg), lipopolysaccharide-induced pyresis (ID(50) = 0.24 mg/kg), and adjuvant-induced arthritis (ID(50) = 0.74 mg/kg/day). Rofecoxib also has a protective effect on adjuvant-induced destruction of cartilage and bone structures in rats. In a (51)Cr excretion assay for detection of gastrointestinal integrity in either rats or squirrel monkeys, rofecoxib has no effect at doses up to 200 mg/kg/day for 5 days. Rofecoxib is a novel cox-2 inhibitor with a biochemical and pharmacological profile clearly distinct from that of current nonsteroidal anti-inflammatory drugs and represents a new therapeutic class of anti-inflammatory agents for the treatment of the symptoms of osteoarthritis and rheumatoid arthritis with improved gastrointestinal tolerability.

L92 ANSWER 14 OF 53 MEDLINE

ACCESSION NUMBER: 1999276002 MEDLINE

DOCUMENT NUMBER: 99276002 PubMed ID: 10348246

TITLE: Role of eicosanoids in the pathogenesis of murine cerebral

malaria.

AUTHOR: Xiao L; Patterson P S; Yang C; Lal A A

CORPORATE SOURCE: Division of Parasitic Diseases, National Center for

Infectious Diseases, Centers for Disease Control and

Prevention, Atlanta, Georgia 30341-3724, USA.

SOURCE: AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE, (1999)

Apr) 60 (4) 668-73.

Journal code: 0370507. ISSN: 0002-9637.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 199906

ENTRY DATE: Entered STN: 19990618

Last Updated on STN: 19990618 Entered Medline: 19990608

AB Because microvascular damage is a common feature of cerebral malaria, we have examined the role eicosanoid metabolites (prostaglandins and

leukotrienes) in experimental cerebral malaria. Eighty ICR mice were infected with Plasmodium berghei ANKA, with 40 uninfected mice as controls. Half of the infected mice were treated on days 4 and 5 with aspirin, a prostaglandin synthesis inhibitor. Infected mice started to die of cerebral malaria on day 6, and by day 17, all infected mice died. In contrast, all infected mice treated with aspirin died by day 12. Infected mice had increased phospholipase A2 mRNA expression in the spleen and cyclooxygenase 1 (COX1) and COX2 expression in the brain. At the peak of cerebral malaria, infected mice had higher serum leukotriene B4 levels than control mice, and aspirin-treated infected mice had higher serum leukotriene B4 levels than untreated infected mice. These results suggest that prostaglandins are protective whereas leukotrienes are detrimental in cerebral malaria.

L92 ANSWER 15 OF 53 MEDLINE

ACCESSION NUMBER: 1999247907 MEDLINE

DOCUMENT NUMBER: 99247907 PubMed ID: 10229670

TITLE: Fish macrophages express a cyclo-oxygenase-2 homologue

after activation.

AUTHOR: Zou J; Neumann N F; Holland J W; Belosevic M; Cunningham C;

Secombes C J; Rowley A F

CORPORATE SOURCE: Department of Zoology, University of Aberdeen, Aberdeen,

AB24 2TZ, UK.

SOURCE: BIOCHEMICAL JOURNAL, (1999 May 15) 340 (Pt 1) 153-9.

Journal code: 2984726R. ISSN: 0264-6021.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199906

ENTRY DATE: Entered STN: 19990714

Last Updated on STN: 19990714 Entered Medline: 19990630

In mammals, the increased generation of prostaglandins (PG) during the ÀΒ onset of inflammatory responses and activation of immune cell types has been attributed to the induction of a novel cyclo-oxygenase (COX) isoform, termed cox-2, which is distinct from the well-characterized constitutive activity (COX-1). Goldfish (Carassius auratus) macrophages exposed to bacterial lipopolysaccharide and leucocyte-derived macrophage-activating factor(s) showed a significant increase in the generation of the major COX product, PGE2, within the first 6 h of stimulation. The selective COX-2 inhibitor, NS398, inhibited this elevated generation of PGE, whereas the basal level of this product synthesized by unstimulated macrophages was unaffected by such exposure. PGE generation by goldfish macrophages was similarly inhibited by the glucocorticoid, dexamethasone, and an inhibitor of protein synthesis, cycloheximide, suggesting that this stimulation may be due to an inducible enzyme equivalent to mammalian cox-2. The complete coding sequence of rainbow trout (Oncorhynchus mykiss) COX-2 was obtained by PCR. The gene contains a 61 bp 5'-untranslated region (UTR), a 1821 bp open reading frame and a 771 bp 3'UTR containing multiple copies of an mRNA instability motif (ATTTA). The predicted translation product had high homology to known mammalian and chicken cox-2 (83-84%) and COX-1 (77%) sequences. Reverse-transcriptase PCR with cDNA from control and bacterially challenged fish revealed that trout cox-2 expression was not constitutive but could be induced. Overall, these studies show for the first time that the inducible isoform of COX has a long evolutionary history, probably dating back to the evolution of fish over 500 million years ago.

L92 ANSWER 16 OF 53 MEDLINE

1999143821 ACCESSION NUMBER: MEDLINE

99143821 PubMed ID: 9989276 DOCUMENT NUMBER:

Eicosanoid biosynthesis in an advanced deuterostomate TITLE:

invertebrate, the sea squirt (Ciona intestinalis). Knight J; Taylor G W; Wright P; Clare A S; Rowley A F AUTHOR:

CORPORATE SOURCE:

School of Biological Sciences, University of Wales Swansea,

Singleton Park, UK.

SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1999 Jan 4) 1436 (3)

467-78.

Journal code: 0217513. ISSN: 0006-3002.

Netherlands PUB. COUNTRY:

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Priority Journals FILE SEGMENT:

ENTRY MONTH: 199903

ENTRY DATE: Entered STN: 19990316

> Last Updated on STN: 19990316 Entered Medline: 19990304

The eicosanoid generating potential of tunic, branchial basket, intestine, ovary and tadpole larvae from the sea squirt, Ciona intestinalis, was AR examined using a combination of reverse phase high performance liquid chromatography, gas chromatography-mass spectrometry and enzyme immunoassay. All organs examined synthesized the lipoxygenase products 12-hydroxyeicosapentaenoic acid (12-HEPE) and 8-HEPE implying that both 8and 12-lipoxygenase activity are widely distributed in this species. In addition, tunic and branchial basket generated significant amounts of 8,15-diHEPE and smaller amounts of 8,15-dihydroxyeicosatetraenoic acid (8,15-diHETE), while tunic alone generated small amounts of conjugated tetraene-containing material with a UV chromophore and mass ion characteristic of a lipoxin-like compound. The broad range lipoxygenase inhibitors, esculetin and nordihydroguaiaretic acid, both caused a significant dose dependent inhibition of 12-HEPE and 8,15-diHEPE biosynthesis in tunic, while the specific 5-lipoxygenase inhibitor, REV-5901, and the specific 5-lipoxygenase activating protein inhibitor, MK-866, had no observable effect on the lipoxygenase profile of this tissue. Tunic, branchial basket, intestine and ovary all generated significant amounts of prostaglandin (PG) E and PGF immunoreactive material and smaller amounts of thromboxane B immunoreactive material as measured by enzyme immunoassay. The non-specific cyclooxygenase (COX) inhibitor, indomethacin, the selective COX-1 inhibitors, resveratrol and valerylsalicylate, and the specific COX-2 inhibitors, NS-398, etolodac and DFU (5,5-dimethyl-3-(3-fluorophenyl)-4-(4methylsulphonyl) phenyl-2(5H)-furanone) all caused a significant dose dependent inhibition of the biosynthesis of PGE immunoreactive material. However, the specific COX-2 inhibitors were most effective, perhaps implying that a cox-2-like enzyme may be present in this species.

L92 ANSWER 17 OF 53 MEDLINE

1999088895 ACCESSION NUMBER: MEDLINE

DOCUMENT NUMBER: 99088895 PubMed ID: 9871729

Synthesis and anti-inflammatory activity of chalcone TITLE:

derivatives.

AUTHOR: ' Herencia F; Ferrandiz M L; Ubeda A; Dominguez J N; Charris

J E; Lobo G M; Alcaraz M J

CORPORATE SOURCE: Departamento de Farmacologia, Universidad de Valencia,

Spain.

SOURCE: BIOORGANIC AND MEDICINAL CHEMISTRY LETTERS, (1998 May 19) 8

(10) 1169-74.

Journal code: 9107377. ISSN: 0960-894X.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199901

ENTRY DATE: Entered STN: 19990209

Last Updated on STN: 19990209 Entered Medline: 19990125

AB Chalcones and their derivatives were synthesized and evaluated for their anti-inflammatory activity. In vitro, chalcones 2, 4, 8, 10 and 13 inhibited degranulation and 5-lipoxygenase in human neutrophils, whereas 11 behaved as scavenger of superoxide. Only four compounds (4-7) inhibited cyclo-oxygenase-2 activity. The majority of these samples showed anti-inflammatory effects in the mouse air pouch model.

L92 ANSWER 18 OF 53 MEDLINE

ACCESSION NUMBER: 1998340207 MEDLINE

DOCUMENT NUMBER: 98340207 PubMed ID: 9675607

TITLE: Measurement of cyclooxygenase inhibition in vivo: a study

of two non-steroidal anti-inflammatory drugs in sheep.

of two finite desired in the finite and the second of the

AUTHOR: Cheng Z; Nolan A M; McKellar Q A

CORPORATE SOURCE: Department of Veterinary Preclinical Studies, University of

Glasgow, UK.

SOURCE: INFLAMMATION, (1998 Aug) 22 (4) 353-66.

Journal code: 7600105. ISSN: 0360-3997.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199810

ENTRY DATE: Entered STN: 19981021

Last Updated on STN: 19981021 Entered Medline: 19981009

The anti-inflammatory effects of the non-steroidal anti-inflammatory drugs AB phenylbutazone (PBZ) and flunixin meglumine (FM) and the relationship between the effects and drug concentration in vivo were studied using a subcutaneous tissue-cage model in sheep. Intracaveal injection of carrageenan induced prostaglandin (PG) E2 production in tissue-cage exudate (maximal concentration, 101 nM) with significant increases in white blood cell (WBC) numbers, skin temperature over the inflamed cage and exudate leukotriene B4 (LTB4) concentration (P < 0.05). Intravenous PBZ, 4.4 mg kg-1 produced mild inhibition of exudate PGE2 generation (10%), but greater inhibition of serum TXB2 (75.3%). The IC50 for TXB2 was 36.0 microM. Phenylbutazone did not alter effects on skin temperature, WBC numbers or exudate LTB4 concentrations. Intravenous FM, 1.1 mg kg-1, significantly inhibited carrageenan-induced exudate PGE2 formation (Emax, 100%, IC50, < 0.4 nM) and serum TXB2 generation (Emax, 100%, IC50, 17 nM) for up to 32 h. Flunixin meglumine significantly inhibited the rise in skin temperature but had a limited effect on exudate WBC. Phenylbutazone and FM have distinct effects on carrageenan-induced cyclooxygenase (COX-2) and platelet COX (COX-1).

Flunixin meglumine was a more potent COX inhibitor than PBZ and was more selective for the inducible form of COX in vivo.

L92 ANSWER 19 OF 53 MEDLINE

ACCESSION NUMBER: 1998319337 MEDLINE

DOCUMENT NUMBER: 98319337 PubMed ID: 9657255 Effects of the cyclooxygenase-2 TITLE:

inhibitor NS-398 on thromboxane and leukotriene

synthesis in rat peritoneal cells.

AUTHOR: Schuligoi R; Amann R; Prenn C; Peskar B A

CORPORATE SOURCE: Department of Experimental and Clinical Pharmacology, Graz,

Austria.. rufina.schuligoi@kfunigraz.ac.at

SOURCE: INFLAMMATION RESEARCH, (1998 May) 47 (5) 227-30.

Journal code: 9508160. ISSN: 1023-3830.

PUB. COUNTRY: Switzerland

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199809

ENTRY DATE: Entered STN: 19980910

> Last Updated on STN: 19980910 Entered Medline: 19980903

AB OBJECTIVE: Inhibition of inducible cyclooxygenase (cox) -

2 has been suggested to offer therapeutic advantages without some side effects associated with the inhibition of constitutive COX activity. These side effects encompass asthmatic responses that can be induced by analgesic/ antiphlogistic drugs and are possibly related to increased leukotriene (LT) biosynthesis. We have therefore investigated

whether or not the selective cox-2 inhibitor NS-398, similar to indomethacin, stimulates leukotriene (LT)

biosynthesis in rat peritoneal cells. METHODS: Three hours after rats had received intraperitoneal injections of bacterial lipopolysaccharide (LPS) or saline, cells were obtained by peritoneal lavage. Northern blot

analysis confirmed induction of cox-2 mRNA by LPS

treatment. For determination of eicosanoid biosynthesis, peritoneal cells were incubated in the presence of various concentrations of test compounds for 60 min. The supernatants were used for radioimmunological

determination of immunoreactive eicosanoids. RESULTS: In cells from LPS treated rats, but not in controls, NS-398 (10-300nM) reduced the amount of TXB2-like immunoreactivity (IR) in the supernatants, the maximum effect being a 25% inhibition. At these concentrations, there was no detectable effect of NS-398 on the amount of LTB4-IR or LTC4-IR in the supernatants. At higher concentrations (1-10 microM), NS-398 caused further inhibition

of TXB2 synthesis, an effect that was observed also in non-LPS treated preparations. A significant increase of LTB4-IR was caused by 3-10 microM NS-398. Indomethacin (3-100 nM) reduced the amount of TXB2-IR, and at >10 nM increased the amount of LTB4- and LTC4-IR in the supernatant.

CONCLUSIONS: The results show that concentrations of NS-398 that

selectively inhibited cox-2 activity, produced no

detectable increase in LT biosynthesis, thus raising the possibility that COX-2 inhibitors are less likely than non-selective COX

inhibitors to produce LT- related side effects.

L92 ANSWER 20 OF 53 MEDLINE

ACCESSION NUMBER: 97404293 MEDLINE

DOCUMENT NUMBER: 97404293 PubMed ID: 9262379

TITLE: Evaluation of the antiinflammatory activity of a dual

cyclooxygenase-2 selective/5-lipoxygenase

inhibitor, RWJ 63556, in a canine model of inflammation. Kirchner T; Argentieri D C; Barbone A G; Singer M; Steber AUTHOR:

M; Ansell J; Beers S A; Wachter M P; Wu W; Malloy E;

Stewart A; Ritchie D M

CORPORATE SOURCE: The R.W. Johnson Pharmaceutical Research Institute,

Raritan, New Jersey 08869, USA.

JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, SOURCE:

(1997 Aug) 282 (2) 1094-101.

Journal code: 0376362. ISSN: 0022-3565.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199709

ENTRY DATE: Entered STN: 19970922

> Last Updated on STN: 19970922 Entered Medline: 19970911

Sterile perforated polyethylene spheres (wiffle golf balls) were implanted AB s.c. in beagle dogs. A local inflammatory reaction was elicited within the spheres by injecting carrageenan. Changes in leukocyte count, prostaglandin E2, thromboxane B2 and leukotriene B4 levels were monitored in fluid samples collected over a 24-hr period. Blood samples were also collected at various time points and analyzed for prostaglandin E2 and leukotriene B4 production after ex vivo calcium ionophore treatment. Effects of standard antiinflammatory agents (aspirin, indomethacin, dexamethasone, tenidap and zileuton) and newer

cyclooxygenase-2 (COX-2) selective

agents (nimesulide, nabumetone and SC-58125) were determined after oral administration. Ex vivo inhibition of cyclooxygenase product synthesis (prostaglandin E2, thromboxane B2) in whole blood was used as an indicator of activity for the constitutive COX-1 isoform, although inhibition of the synthesis of these mediators in the chamber exudate during an inflammatory process is believed to represent COX-2 inhibition.

Treatment effects on leukotriene B4 production were also determined both ex vivo in whole blood and in the fluid. All of the compounds tested, except aspirin, inhibited leukocyte infiltration into the fluid exudate. Inhibitors that exert their effects on both isozymes of cyclooxygenase attenuate production of cyclooxygenase metabolites in both the inflammatory exudate and in peripheral blood ex vivo, although

cox-2 selective inhibitors only demonstrated activity in the exudate. A 5-lipoxygenase inhibitor (zileuton), a corticosteroid (dexamethasone) and a dual cox-2 selective/5-

lipoxygenase inhibitor (RWJ 63556) had similar profiles in that they all inhibited cell infiltration and eicosanoid production in the fluid and also attenuated leukotriene B4 production in both the fluid and blood.

L92 ANSWER 21 OF 53 MEDLINE

96118470 MEDLINE ACCESSION NUMBER:

PubMed ID: 8534265 DOCUMENT NUMBER: 96118470

Meloxicam: influence on arachidonic acid metabolism. Part TITLE:

II. In vivo findings.

Engelhardt G; Bogel R; Schnitzler C; Utzmann R AUTHOR:

CORPORATE SOURCE: Department of Pharmacological Research, Dr. Karl Thomae

GmbH, Biberach/Riss, Germany.

BIOCHEMICAL PHARMACOLOGY, (1996 Jan 12) 51 (1) 29-38. SOURCE:

Journal code: 0101032. ISSN: 0006-2952.

PUB. COUNTRY: ENGLAND: United Kingdom DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

199601

ENTRY DATE:

Entered STN: 19960220

Last Updated on STN: 19960220 Entered Medline: 19960130

Meloxicam is a new nonsteroidal anti-inflammatory drug (NSAID) derived AB from enolic acid. Preclinical studies have indicated that meloxicam has potent anti-inflammatory activity, together with a good gastrointestinal and renal tolerability profile. This report summarizes studies undertaken to compare meloxicam to other NSAIDs in the inhibition of the inducible cyclooxygenase (cox-2) in inflamed areas (pleurisy of the rat, peritonitis of mice) and their influence on the activity of the constitutive cyclooxygenase (COX-1) in stomach, kidney, brain, and blood. In pleurisy of the rat, meloxicam was twice as potent as tenoxicam, 3 times as potent as flurbiprofen, 8 times as potent as diclofenac, and 20 times as potent as tenidap at inhibiting prostaglandin E2 (PGE2) biosynthesis. In the peritonitis model in mice, meloxicam was approximately twice as active as piroxicam, and more than 10 times as active as diclofenac in the suppression of PGE biosynthesis. Doses of meloxicam sufficient to inhibit PGE2 biosynthesis in the pleural exudate and peritoneal exudate had no influence on leukotriene-B4 (LTB4) or leukotriene-C4 (LTC4) content. The effect of meloxicam on the PGE2 content of rat gastric juice and rat urine was weaker than that of piroxicam or diclofenac. Meloxicam was a weaker inhibitor of the increased PGE2 concentration in brain of rats and mice (induced by convulsant doses of pentetrazole) than piroxicam, diclofenac, or indomethacin. Meloxicam had a weaker effect on serum thromboxane-B2 (TXB2) concentration in rats than piroxicam or tenoxicam. The in vivo findings confirm the results of in vitro tests, conducted separately, showing that meloxicam preferentially inhibits cox-2 over COX-1. cox -2 is the inducible isoenzyme implicated in the inflammatory response, whereas COX-1 has cytoprotective effects in the gastric mucosa. Therefore, a preferential selectivity for one isoenzyme over another, as displayed by meloxicam, may have implications in the clinical setting in terms of a more favorable risk: benefit profile.

L92 ANSWER 22 OF 53 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:695783 HCAPLUS

DOCUMENT NUMBER:

137:216886

TITLE:

Preparation of 8-(alkenylaryl)quinoline

phosphodiesterase-4 inhibitors

INVENTOR(S):

Vailaya, Anant; Conlon, David A.; Ho, Guo-Jie; Macdonald, Dwight; Perrier, Helene; Thibert, Roch;

Kwong, Elizabeth; Clas, Sophie-Dorothee

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA; Merck Frosst Canada & Co.

SOURCE:

PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2002069970 A1 20020912 WO 2001-US48674 20011214

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                      GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
                      LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
                      PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
                     UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
               RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
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                                      A1
                                              20021003
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                                                                                                     20011109
        US 2002143032
PRIORITY APPLN. INFO.:
                                                                   US 2000-256803P P 20001220
                                         MARPAT 137:216886
OTHER SOURCE(S):
        Title compds. I [wherein S1-S3 = independently H, OH, halo, NO2, CN, or
         (un) substituted alkyl or alkoxy; R1 = H, .OH, halo, or (un) substituted
        acyl, (cyclo)alkyl, alkenyl, alkoxy, (hetero)aryl, heterocycloalkyl, NH2,
        carbamoyl, sulfamoyl, etc.; A = CH, C-ester, or CR4; R2 and R3 =
        independently H, halo, CN, CO2H, or (un) substituted (hetero) aryl,
         (heterocyclo)alkyl, alkoxy, acyl, carbamoyl, etc.; with the proviso that 1
        of R2 and R3 must = (hetero)aryl; when R2 and R2 both = (hetero)aryl, then
        R2 and R3 may be optionally connected by a thio, oxy, or alkyl bridge to
        from a fused 3-ring system; R4 = CN or (un)substituted (hetero)aryl,
        alkyl, acyl, carbamoyl, etc.; or R2 or R3 may be optionally joined to R4
        by a bond to form a ring; n = 0-2; and pharmaceutically acceptable H2SO4,
        methanesulfonic acid, p-toluenesulfonic acid, 2-naphthalenesulfonic acid,
        hydrochloride acid, or benzenesulfonic acid salts thereof] were prepd. as
        phosphodiesterase-4 (PDE4) inhibitors. For example, a soln. of
         (E) -1 - (3-bromophenyl) -2 - (3-methyl-1, 2, 4-oxadiazol-5-yl) -2 - [4-oxadiazol-5-yl) -2 - [4-oxadiazol-5-yl) -2 - [4-oxadiazol-5-yl] -2 - [4-oxad
         (methylsulfonyl)phenyl]ethene, diboron pinacol ester, [1,1'-
        bis(diphenylphosphino)ferrocene]PdCl2, and KOAc in DMF was stirred at
        80.degree. for 3 h. Sequential addn. of 6-[1-methyl-1-
         (methylsulfonyl)ethyl]-8-bromoquinoline, [1,1'-
        bis(diphenylphosphino)ferrocene]PdCl2, and Na2CO3 followed by heating at
        80.degree. overnight gave (E) - and (Z)-II. Forty-two compds. of the
        invention exhibited IC50 values ranging from 0.04 .mu.M to 8.71 .mu.M in
        LPS and fMLP-induced TNF-.alpha. and LTB4 assays performed on human whole
        blood. All but one of same compds. inhibited the hydrolysis of cAMP to
        AMP by type-IV cAMP-specific phosphodiesterases with IC50 values ranging
        from 0.14 nM to 10.24 nM. Thus, I are useful as anti-inflammatory and
        anti-allergic agents for treatment of a wide variety of PDE4-related
        diseases and conditions (no data).
                                                    THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                          5
                                                    RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L92 ANSWER 23 OF 53 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                                          2002:594822 HCAPLUS
DOCUMENT NUMBER:
                                          137:154857
                                          Preparation of nicotinamide biaryl derivatives as
TITLE:
                                          inhibitors of PDE4 isozymes
                                          Chambers, Robert James; Magee, Thomas Victor; Marfat,
INVENTOR(S):
                                          Anthony
PATENT ASSIGNEE(S):
                                          Pfizer Productors Inc., USA
                                          PCT Int. Appl., 224 pp.
SOURCE:
                                          CODEN: PIXXD2
DOCUMENT TYPE:
                                          Patent
                                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                        APPLICATION NO.
                                                                                                     DATE
        PATENT NO.
                                     KIND DATE
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WO 2001-IB2341 20011206
                       A1 20020808
     WO 2002060875
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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              UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
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              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                            US 2001-265492P P 20010131
OTHER SOURCE(S):
                           MARPAT 137:154857
     The title compds. [I; g = 0-1; j = 0-1; provided that when j = 0, n must
     be 2; k = 0-1; m = 0-2; n = 1-2; W1 = 0, Sot (t = 0-2), NR3; W2 = OCR9R10,
     or absent; Y = CR1, NOk (k = 0-1); R9, R10 = H, F, CF3, etc.; or R9 and
     R10 are taken together, but only in the case where m = 1, to form a spiro
     moiety; R7, R8 have the same meaning as R9, R10 except that one of them
     must be H; R1, R2 = H, F, C1, etc.; R3 = H, alkyl, Ph, etc.; R4-R6 = H, F,
     Cl, etc.; Q1 = Ph, benzodioxyl, etc.; Q2 = biaryl moiety], useful as
     inhibitors of PDE4 in the treatment of diseases regulated by the
     activation and degranulation of eosinophils, esp. asthma, chronic
     bronchitis, and chronic obstructive pulmonary disease, were prepd. E.g.,
     a multi-step synthesis of the amide II, starting from Me 3-bromobenzoate
     and 4-formylbenzeneboronic acid, was given. Compds. I showed
     anti-inflammatory activity at 0.0001 .mu.M to 20.0 .mu.M in whole blood
     assay for LTE4.
                                  THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                            8
                                  RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L92 ANSWER 24 OF 53 HCAPLUS COPYRIGHT 2002 ACS
                           2002:594628 HCAPLUS
ACCESSION NUMBER:
                           137:150265
DOCUMENT NUMBER:
                           Substituted aryl compounds as novel
TITLE:
                           cyclooxygenase-2 selective
                            inhibitors, compositions and methods of use
                           Khanapure, Subhash P.; Garvey, David S.; Earl, Richard
INVENTOR(S):
                           A.; Ezawa, Maiko; Fang, Xinqin; Gaston, Ricky D.
                           Nitromed, Inc., USA
PATENT ASSIGNEE(S):
                           PCT Int. Appl., 132 pp.
SOURCE:
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                             APPLICATION NO. DATE
     PATENT NO.
                        KIND
                               DATE
                               -----
                                               _____
     _____
                        ____
                                          WO 2001-US48823 20011221
     WO 2002060378
                       A2 20020808
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002119977 20020829 US 2001-24046 20011221 A1 US 2000-256932P P 20001221 PRIORITY APPLN. INFO.: MARPAT 137:150265 OTHER SOURCE(S): Substituted aryl compds. that are cyclooxygenase 2 (COX-2) selective inhibitors and compns. comprising at least one cox-2 selective inhibitor, and, optionally, at least one compd. that donates, transfers or releases nitric oxide, stimulates endogenous synthesis of nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor or is a substrate for nitric oxide synthase, and/or, optionally, at least one therapeutic agent are described. A therapeutic agent is selected from steroids, nonsteroidal anti-inflammatory compds. (NSAID), 5-lipoxygenase (5-LO) inhibitors, leukotriene B4 (LTB4) receptor antagonists, leukotriene A4 (LTA4) hydrolase inhibitors, 5-HT agonists, 3-hydroxy-3-methylglutaryl CoA (HMG-CoA) inhibitors, H2 antagonists, antineoplastic agents, antiplatelet agents, thrombin inhibitors, thromboxane inhibitors, decongestants, diuretics, sedating or non-sedating antihistaminics, inducible nitric oxide synthase inhibitors, opioids, analgesics, Helicobacter pylori inhibitors, proton pump inhibitors, and isoprostane inhibitors. The invention also provides novel kits comprising at least one COX-2 selective inhibitor, and, optionally, at least one nitric oxide donor, and/or, optionally, at least one therapeutic agent. The cyclooxygenase-2 selective inhibitors of the invention can be optionally nitrosated and/or nitrosylated. The invention also provides methods for treating inflammation, pain and fever; for treating and/or improving the gastrointestinal properties of COX-2 selective inhibitors; for facilitating wound healing; for treating and/or preventing renal toxicity or other toxicities; for treating and/or preventing other disorders resulting from elevated levels of cyclooxygenase-2; and for improving the cardiovascular profile of cox-2 selective inhibitors.

L92 ANSWER 25 OF 53 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:172487 HCAPLUS

DOCUMENT NUMBER: 136:221745

TITLE: Irrigation solution and method for inhibition of pain

and inflammation

INVENTOR(S): Demopulos, Gregory A.; Pierce-Palmer, Pamela; Herz,

Jeffrey M.

PATENT ASSIGNEE(S): Omeros Medical Systems, USA

SOURCE: U.S. Pat. Appl. Publ., 58 pp., Cont.-in-part of Appl.

No. PCT/US99/24625.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND D	DATE	APPLICATION NO.	DATE				
US 2002028798	A1 2	20020307	US 2001-839633	20010420				
WO 9619233	A2 1	19960627	WO 1995-US16028	19951212				
WO 9619233	A3 1	19960919						
W: AL, AM,	AT, AU,	BB, BG, BR,	BY, CA, CH, CN, CZ	, DE, DK, EE, ES,				
FI, GB,	GE, HU,	IS, JP, KE,	KG, KP, KR, KZ, LK	, LR, LS, LT, LU,				
LV, MD,	MG, MK,	MN, MW, MX,	NO, NZ, PL, PT, RO	, RU, SD, SE, SG,				
SI, SK								

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RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
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             NE, SN, TD, TG
                            19981013
                                           US 1996-670699
                                                             19960626
     US 5820583
                       Α
    US 6261279
                            20010717
                                           US 1998-72913
                                                             19980504
                       В1
                            20000427
                                           WO 1999-US24557
                                                            19991020
    WO 2000023061
                       A2
    WO 2000023061
                      A3
                            20001116
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             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    WO 2000023062
                      A2
                            20000427
                                          WO 1999-US24558
                            20000727
    WO 2000023062
                      A3
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             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
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             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                           20000427
    WO 2000023066
                      A2
                                           WO 1999-US24672 19991020
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                            20000511
                                           WO 1999-US26330 19991105
    WO 2000025745
                       A2
    WO 2000025745
                       А3
                            20000824
             AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
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             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,
PRIORITY APPLN. INFO.:
                                        US 1994-353775
                                                          B2 19941212
                                        WO 1995-US16028
                                                         A2 19951212
                                        US 1996-670699
                                                          A2 19960626
                                        US 1998-72913
                                                          A2 19980504
                                        US 1998-105026P
                                                             19981020
                                                          P
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                                        US 1998-105029P
                                                             19981020
                                        US 1998-105044P
                                                          Ρ
                                                             19981020
                                        US 1998-105166P
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                                                             19981021
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                                        US 1998-107256P
                                                             19981105
                                        WO 1999-US24557
                                                         A2 19991020
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WO 1999-US24558 A2 19991020
WO 1999-US24625 A2 19991020
WO 1999-US24672 A2 19991020
WO 1999-US26330 A2 19991105
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AB A method and soln. for perioperatively inhibiting a variety of pain and inflammation processes at wounds from general surgical procedures including oral/dental procedures. The soln. preferably includes at least one pharmacol. agent selected from the group consisting of a mitogen-activated protein kinase (MAPK) inhibitor, an .alpha.2-receptor agonist, a neuronal nicotinic acetylcholine receptor agonist, a cyclooxygenase-2 (COX-2) inhibitor, a sol. receptor and mixts. thereof, and optionally addnl. multiple pain and inflammation inhibitory agents at dil. concn. in a physiol. carrier, such as saline or lactated Ringer's soln. The soln. is applied by continuous irrigation of a wound during a surgical procedure for preemptive inhibition of pain and while avoiding undesirable side effects assocd. with oral, i.m., s.c. or i.v. application of larger doses of the agents.

L92 ANSWER 26 OF 53 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:84600 HCAPLUS

DOCUMENT NUMBER:

136:151161

TITLE:

Preparation of 4-(heterocyclyl)benzenesulfonamides as

components of a combination of a cyclooxygenase-2 inhibitors and a leukotriene B4 receptor antagonist

INVENTOR(S):

Isakson, Peter C.; Anderson, Gary D.; Gregory, Susan

Α.

PATENT ASSIGNEE(S): G. D. Searle & Co., USA

SOURCE:

U.S., 19 pp., Cont.-in-part of U.S. Ser. No. 489,415,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 6342510	В1	20020129	US 1996-661641 19960611
CA 2224563	AA	19961227	CA 1996-2224563 19960611
US 2002107276	Al	20020808	US 2002-38080 20020103
PRIORITY APPLN. INFO.:	:		US 1995-489415 B2 19950612
			US 1996-661641 A1 19960611

OTHER SOURCE(S): MA

MARPAT 136:151161

AB The title compds. [I; A = (partially) unsatd. heterocyclyl or carbocyclyl; R1 = (un)substituted heterocyclyl, cycloalkyl, cycloalkenyl, aryl; R2 = Me, NH2; R3 = H, halo, alkyl, etc.] which are cyclooxygenase-2 inhibitors used in combination with a leukotriene B4 receptor antagonists for treatment of inflammation and inflammation-related disorders, were prepd. and formulated. Thus, treating Et trifluoroacetate with NaOMe in Me tert-Bu ether followed by addn. of 4'-chloroacetophenone (85%), and reacting the resulting 4,4,4-trifluoro-1-(4-chlorophenyl)butane-1,3-dione with 4-sulfonamidophenylhydrazine hydrochloride in EtOH afforded 4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide (80%).

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 27 OF 53 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:51982 HCAPLUS

DOCUMENT NUMBER:

136:96105

TITLE:

Use of cox-2 inhibitors to treat

sepsis, complications thereof, and pros EP receptor

modulation

INVENTOR(S):

Mack Strong, Vivian E.; Stapleton, Philip P.; Daly,

John M.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 39 pp.

CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE _____ _____ ____ US 2002006915 **A**1 20020117 US 2001-782936 20010214 US 2000-182524P P 20000215 PRIORITY APPLN. INFO.:

The present invention is directed to methods of preventing, inhibiting, reversing and/or ameliorating complications in those having or at risk for systemic inflammatory response syndrome, e.g., sepsis, including multiple organ dysfunction syndrome, pancreatitis, burns, trauma, and complications of sepsis such as bacteremia, pneumonia, urinary tract infections, wound infections, and drug reactions. The methods comprise administration of an effective amt. of at least one of a selective inhibitor of cyclooxygenase-2, a drug which stimulates one or more PGE2 receptors or a drug which interferes with binding of PGE2 to one of

L92 ANSWER 28 OF 53 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

more PGE2 receptors.

2002:5125 HCAPLUS

DOCUMENT NUMBER:

136:319026

TITLE:

A pyrrologuinazoline derivative with anti-inflammatory

and analgesic activity by dual inhibition of

cyclo-oxygenase-2 and 5-lipoxygenase

AUTHOR(S):

Rioja, Inmaculada; Terencio, M. Carmen; Ubeda, Amalia;

Molina, Pedro; Tarraga, Alberto; Gonzalez-Tejero,

Antonia; Alcaraz, M. Jose

CORPORATE SOURCE:

Facultad de Farmacia, Departamento de Farmacologia, Universidad de Valencia, Burjasot, Valencia, 46100,

Spain

SOURCE:

European Journal of Pharmacology (2002), 434(3),

177-185

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal

English

LANGUAGE:

In a previous study, we reported a new pyrroloquinazoline deriv., 3-(4'-acetoxy-3',5'-dimethoxy)benzylidene-1,2-dihydropyrrolo[2,1b]quinazoline-9-one (PQ), which inhibited human purified 5-lipoxygenase activity and prostaglandin E2 release in lipopolysaccharide-stimulated RAW 264.7 cells. In the present work, we show that PQ inhibits cyclo-oxygenase-2 activity in intact cell assays (human monocytes) and purified enzyme prepns. (ovine isoenzymes) without affecting

cyclo-oxygenase-1 activity. This behavior was confirmed in vivo by using the zymosan-injected mouse air pouch model, where PQ caused a marked redn. in cell migration and leukotriene B4 levels at 4 h, as well as inhibition of prostaglandin E2 levels without affecting cyclo-oxygenase-2 expression at 24 h after zymosan stimulation. In addn., oral administration of this compd. significantly reduced carrageenan-induced mouse paw edema and phenyl-p-benzoquinone-induced writhings in mice. These results indicate that oral PQ exerts analgesic and anti-inflammatory effects, which are related to dual inhibition of cyclo-oxygenase-2 and 5-lipoxygenase activities. THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

47

L92 ANSWER 29 OF 53 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:811166 HCAPLUS

136:161131 DOCUMENT NUMBER:

REFERENCE COUNT:

TITLE: Acute effects of the cys-leukotriene-1

receptor antagonist, montelukast, on experimental

colitis in rats

AUTHOR(S): Holma, Reetta; Salmenpera, Pertteli; Riutta, Asko;

Virtanen, Ismo; Korpela, Riitta; Vapaatalo, Heikki

Institute of Biomedicine, Pharmacology, Biomedicum CORPORATE SOURCE:

Helsinki, University of Helsinki, Helsinki, FIN-00014,

Finland

European Journal of Pharmacology (2001), 429(1-3), SOURCE:

309-318

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier Science B.V.

Journal DOCUMENT TYPE: English LANGUAGE:

Cysteinyl leukotrienes play a part in inflammatory reactions such as inflammatory bowel diseases. The aim of the present study was to evaluate the acute effects of a cys-leukotriene-1 receptor antagonist, montelukast, on trinitrobenzene sulfonic acid (TNBS)-induced colitis in rats. Montelukast (5, 10 or 20 mg kg-1 day-1), a 5-lipoxygenase inhibitor, zileuton (50 or 100 mg kg-1 day-1, a pos. control), or the vehicle was administered intracolonically to the rats twice daily throughout the study, starting 12 h before the induction of colitis with TNBS. The severity of colitis (macroscopic and histol. assessment, as well as myeloperoxidase activity), the protein expression of inducible nitric oxide synthase (iNOS) and cyclooxygenase-2, and eicosanoid prodn. in colonic tissue incubation were assessed 24 and 72 h after colitis induction. Montelukast increased prostaglandin E2 prodn. at 24 h and tended to reduce the cyclooxygenase-2 protein expression at 72 h, but did not influence the severity of colitis. Zileuton failed to decrease the inflammatory reaction in spite of reduced leukotriene B4 prodn. at 72 h. The results suggest that drugs that block cysteinyl leukotriene receptors have limited potential to ameliorate acute TNBS-induced colitis, but that they exert some beneficial effects which make them capable of modulating the course of colitis.

THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 62 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 30 OF 53 HCAPLUS COPYRIGHT 2002 ACS

2001:795108 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:144877

TITLE: Identification of Dual Cyclooxygenase-Eicosanoid Oxidoreductase Inhibitors: NSAIDs That Inhibit PG-LX

Reductase/LTB4 Dehydrogenase

AUTHOR(S):

SOURCE:

Clish, Clary B.; Sun, Yee-Ping; Serhan, Charles N. Center for Experimental Therapeutics and Reperfusion CORPORATE SOURCE:

Injury, Department of Anesthesiology, Perioperative and Pain Medicine, Brigham & Women's Hospital and Harvard Medical School, Boston, MA, 02115, USA Biochemical and Biophysical Research Communications

(2001), 288(4), 868-874

CODEN: BBRCA9; ISSN: 0006-291X

Academic Press PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

Eicosanoids play key roles in many physiol. and disease processes, and their regulation by nonsteroidal anti-inflammatory drugs (NSAIDs) is crit. to many therapeutic approaches. These autacoids are rapidly inactivated by specific enzymes such as 15-hydroxyprostaglandin dehydrogenase (15-PGDH) and 15-oxoprostaglandin 13-reductase/leukotriene B4 12-hydroxydehydrogenase (PGR/LTB4DH) that act on main series of eicosanoids (i.e., leukotrienes, prostaglandins), and recently found to act in lipoxin inactivation. Here, a panel of NSAIDs was assessed to det. each compd.'s ability to inhibit eicosanoid-directed activities of either the recombinant 15-PGDH or the PG-LXR/LTB4DH. recombinant 15-PGDH that acts on both prostaglandin E2 (PGE2) and lipoxin A4 (LXA4) was not significantly inhibited by the NSAIDs tested. In contrast, several of the widely used NSAIDs were potent inhibitors of the PG-LXR/LTB4DH that metabolizes 15-oxo-PGE2, and LTB4 as well as 15-oxo-LXA4. Diclofenac and indomethacin each inhibited PG-LXR/LTB4DH-catalyzed conversion of 15-oxo-PGE2 to 13,14-dihydro-15-oxo-PGE2 by 70 and 95%, resp. Also, a cox-2 inhibitor, niflumic acid, inhibited the PG-LXR/LTB4DH eicosanoid oxidoreductase (EOR) by 80% while other COX-2 inhibitors such as nimesulide and NS-398 did not inhibit this enzyme. These results indicate that certain clin. useful NSAIDs such as diclofenac and indomethacin, in addn. to inhibiting cyclooxygenases (1 and 2), also interfere with eicosanoid degrdn. by blocking PG-LXR/LTB4DH (EOR) and are members of a new class of dual cyclooxygenase (COX)-EOR inhibitors. Moreover, they suggest that the impact of NSAIDs on PG-LXR/LTB4DH activities as targets in the local tissue regulation of eicosanoid-mediated processes should be taken into account. (c) 2001 Academic Press.

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 25 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 31 OF 53 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:472677 HCAPLUS

DOCUMENT NUMBER: 135:76803

Synthesis and use of substituted 8-arylquinolines (and TITLE:

sulfonic acid salts thereof) as inhibitors of

phosphodiesterase-4

Deschenes, Denis; Dube, Daniel; Gallant, Michel; INVENTOR(S):

Girard, Yves; Lacombe, Patrick; MacDonald, Dwight;

Mastracchio, Anthony; Perrier, Helene

Merck Frosst Canada + Co., Can. PATENT ASSIGNEE(S):

PCT Int. Appl., 263 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

AUTHOR(S):

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APPLICATION NO. DATE
     PATENT NO.
                      KIND DATE
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                                      WO 2000-CA1559 20001220
                     Al 20010628
     WO 2001046151
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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                           20020625
                                          US 2000-741517
     US 6410563
                      В1
                            20020801
     US 2002103226
                       A1
     BR 2000016651
                            20020910
                                          BR 2000-16651
                                                             20001220
                       Α
     EP 1244628
                      A1
                            20021002
                                          EP 2000-986937 20001220
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     NO 2002003013 A 20020822
                                          NO 2002-3013
                                                             20020621
                                         US 1999-171522P P 19991222
PRIORITY APPLN. INFO.:
                                         WO 2000-CA1559 W 20001220
                        MARPAT 135:76803
OTHER SOURCE(S):
     Compds. of formula I are claimed [wherein; S1-3 = H, OH, halo,
     (substituted) alkyl/alkoxy, NO2 and CN; R1 = H, OH, halo, CO, (cyclo) alkyl, alkenyl, alkoxy, (hetero) aryl, CN, etc.; R2-3=H, alkyl, halo,
     heterocycloalkyl, alkoxy, CO, carbamoyl, COOH, alkyl-S(O)0-2-alkyl; etc.;
     one of R2 or R3 must be (substituted) aryl/heteroaryl and when both R2 and
     R3 are aryl/heteroaryl then R2 and R3 may be optionally connected by a S,
     O or alkyl bridge to form a fused three ring system; A = CH, C-ester or
     CR4 where R4 = aryl, alkyl, heteroaryl, CN, CO, etc.; R2 or R3 may also be
     joined to R4 by a bond to form a ring]. Over 40 synthetic examples are
     given. For instance, 4-(methylsulfonyl)phenylacetic acid was condensed
     with acetamide oxime to give (3-methyl-1,2,4-oxadiazol-5-yl)[4-
     (methylsulfonyl)phenyl]methane. This intermediate was condensed with
     3-bromobenzaldehyde to give the (E)-bromide. Pd-mediated coupling of the
     (E)-bromide, via the intermediate pinacol boronate deriv. (not isolated),
     to the substituted 8-bromoquinoline furnished biaryl II. Several sulfonic
     acid salts of II as well as 2 polymorphs of the benzenesulfonic acid salt
     of II were characterized (NMR, XRPD, etc.). In an assay of LPS and
     fMLP-induced TNF-.alpha. and LTB4 prodn. in whole blood (surrogate markers
     for PDE-4 inhibition), example compds. had IC50 = 0.04 to 8.71 .mu.M.
     Compds. of the invention also inhibited a type-IV cAMP-specific PDE, IC50
     = 0.14 to 10.24 nM. A method to treat/prevent asthma, chronic bronchitis,
     chronic obstructive pulmonary disease, eosinophilic granuloma, psoriasis,
     etc. is a claimed use of the invention.
                               THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
                         5
REFERENCE COUNT:
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L92 ANSWER 32 OF 53 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         2001:207649 HCAPLUS
DOCUMENT NUMBER:
                         135:40643
                         Dysidotronic acid, a new sesquiterpenoid, inhibits
TITLE:
                         cytokine production and the expression of nitric oxide
                         synthase
```

M. V.; Paya, M.

Posadas, I.; Terencio, M. C.; Giannini, C.; D'Auria,

CORPORATE SOURCE:

Departamento de Farmacologia, Facultad de Farmacia, Universidad de Valencia, Burjassot, Valencia, 46100,

Spain

SOURCE:

European Journal of Pharmacology (2001), 415(2,3),

285-292

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal

LANGUAGE: English

In a previous study, we reported a new bioactive sesquiterpenoid, named AB dysidotronic acid, to be a potent, selective human synovial phospholipase A2 inhibitor. Dysidotronic acid is a novel, non-complex manoalide analog lacking the pyranofuranone ring. We now investigate the effect of this compd. on cytokine, nitric oxide and prostanoid generation on the mouse macrophage cell line RAW 264.7, where it showed a dose-dependent inhibition with inhibitory concn. 50% values in the micromolar range. This effect was also confirmed in the mouse air pouch injected with zymosan. Dysidotronic acid inhibited the prodn. of tumor necrosis factor alpha and interleukin-1 beta as well as the prodn. of nitric oxide, prostaglandin E2 and leukotriene B4. Decreased nitric oxide generation was the consequence of inhibition of the expression of nitric oxide synthase, whereas PGE2 and LTB4 redn. was due to inhibition of arachidonic acid bioavailability through a direct inhibitory effect of dysidotronic acid on secretory phospholipase A2.

REFERENCE COUNT:

THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 33 OF 53 HCAPLUS COPYRIGHT 2002 ACS

37

ACCESSION NUMBER:

1997:557660 HCAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

127:239120

TITLE:

Compositions comprising a cyclooxygenase-

· 2 inhibitor and a leukotriene B4

receptor antagonist for reducing transplant rejection Gregory, Susan A.; Isakson, Peter C.; Anderson, Gary

PATENT ASSIGNEE(S):

G.D. Searle & Co., USA; Gregory, Susan A.; Isakson,

PCT Int. Appl., 63 pp.

SOURCE:

CODEN: PIXXD2

Peter C.; Anderson, Gary

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT :	NO.		KI	ND	DATE			Α	PPLI	CATI	ON N	ο.	DATE				
 ₩∩	9729775		Δ1 19970821				WO 1997-US1422					19970211						
"														CN,		CZ,	DE,	
		-	-			-								KP,				٠
		LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	
		YU,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM							
	RW:	KE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	
		MR,	NE,	SN,	TD,	ΤG												
CA	2246	356		A	A.	1997	0821		C.	A 19	97-2	2463	56	1997	0211			
ΑU	AU 9722500 A1 19970902			AU 1997-22500					19970211									
EΡ	8803	62		Α	1	1998	1202		E	P 19	97-9	0566	3	1997	0211			
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙE,	FΙ

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JP 2000505445
                       T2
                            20000509
                                            JP 1997-529359
                                                             19970211
                                            US 1998-75633
     US 6172096
                            20010109
                                                             19980511
                       В1
                                                        A1 19960213
                                         US 1996-600580
PRIORITY APPLN. INFO.:
                                                          W 19970211
                                         WO 1997-US1422
                         MARPAT 127:239120
OTHER SOURCE(S):
     Treatment with a cyclooxygenase-2 inhibitor and a
     leukotriene B4 receptor antagonist is described as being useful in
     reducing recipient rejection of transplanted organs and for treatment of
     autoimmune diseases.
L92 ANSWER 34 OF 53 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1997:175052 HCAPLUS
DOCUMENT NUMBER:
                         126:166481
                         Combination of a cyclooxygenase-2
TITLE:
                         inhibitor and a leukotriene B4 receptor
                         antagonist for the treatment of inflammations
                         Isakson, Peter C.; Anderson, Gary D.; Gregory, Susan
INVENTOR(S):
                         G.D. Searle & Co., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 72 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                          APPLICATION NO. DATE
     PATENT NO.
                      KIND DATE
                            19961227
                                           WO 1996-US9905
     WO 9641645
                      A1
                                                            19960611
         W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,
             LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
                                           CA 1996-2224563 19960611
     CA 2224563
                       AΑ
                            19961227
     AU 9662694
                       A1
                            19970109
                                           AU 1996-62694
                                                             19960611
                                           EP 1996-921477
                                                             19960611
     EP 833664
                            19980408
                       A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                            19990706
                                            JP 1996-503237
                                                             19960611
     JP 11507669
                       T2
PRIORITY APPLN. INFO .:
                                         US 1995-489415
                                                        A 19950612
                                         WO 1996-US9905
                                                          W 19960611
OTHER SOURCE(S):
                         MARPAT 126:166481
     Combinations of a cyclooxygenase-2 inhibitor and a
     leukotriene B4 receptor antagonist are described for treatment of
     inflammation and inflammation-related disorders. The
     cyclooxygenase-2 inhibitors were prepd. Also,
     formulations for the drug combination are described.
L92 ANSWER 35 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT ACCESSION NUMBER: 2002-22912 DRUGU P B
                  Ebselen, a glutathione peroxidase mimetic
TITLE:
                  seleno-organic compound, as a multifunctional antioxidant.
                  Nakamura Y; Feng Q; Kumagai T; Torikai K; Ohigashi H; Osawa
AUTHOR:
                  T; Noguchi N; Niki E; Uchida K
CORPORATE SOURCE: Univ. Nagoya; Univ. Kyoto; Univ. Tokyo
LOCATION:
                  Nagoya, Kyoto; Tokyo, Jap.
                  J.Biol.Chem. (277, No. 4, 2687-94, 2002) 7 Fig. 65 Ref.
SOURCE:
```

CODEN: JBCHA3 ISSN: 0021-9258

AVAIL. OF DOC.: Laboratory of Food and Biodynamics, Nagoya University

Graduate School of Bioagricultural Sciences, Nagoya 464-8601,

Japan. (K.U.). (e-mail: uchidak@agr.nagoya-u.ac.jp).

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

Topical ebselen (Daiichi) pretreatment inhibited

12-O-tetradecanylphorbol-13-acetate (TPA)-induced increase in
thiobarbituric acid-reacting substances (TBARS) level in a mouse skin
model. Ebselen suppressed hydrogen peroxide (H2O2) formation,
TPA-induced skin edema formation and infiltration of PMN, and COX
-2 protein expression. Ebselen also inhibited O2
generation. In vitro, ebselen induced NAD(P)H: (quinoneacceptor)oxidoreductase (NQO1) activity and glutathione S-transferase
(GST) activity and increased GSTP1 and chloramphenicol acetyltransferase
(ECAT) gene in rat hepatocyte RL34 cells. Data suggest that
ebselen is a potential chemopreventive agent in

L92 ANSWER 36 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 2002-20358 DRUGU P B S

TITLE: The mechanism of action of the new antiinflammatory compound

ML3000: inhibition of 5-LOX and COX-1/2.

AUTHOR: Tries S; Neupert W; Laufer S

inflammation-associated carcinogenesis.

CORPORATE SOURCE: Merckle; Univ.Tubingen LOCATION: Blaubeuren; Tubingen, Ger.

SOURCE: Inflammation Res. (51, No. 3, 135-43, 2002) 8 Fig. 77 Ref.

CODEN: INREF ISSN: 1023-3830

AVAIL. OF DOC.: Preclinical Development, Merckle GmbH, P.O. Box 1161,

DE-89135 Blaubeuren, Germany. (e-mail: susatrie@merckle.de).

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL: AB; LA; CT
FILE SEGMENT: Literature

In human whole blood, ML-3000 (Merckle) blocked TXB2 production without increasing LTC4 production. ML-3000 blocked LTB4 production in RBL cells. In rats with carrageenan-induced paw edema, p.o. ML-3000 suppressed PGE2 and LTB4 production in the inflamed paw. In rats with trinitrobenzenesulfonic acid (TNBS, Caledon) colitis, p.o. ML-3000 suppressed both colon LTB4 and PGE2 production without altering stomach LTB4 production, using indomethacin (Sigma-Chem.), MK-886 (Merck-Frosst), nordihydroguaiaretic acid (NDGA) and diclofenac as standard. GI tolerability of ML-3000 reflected its combined inhibition of cyclooxygenase-1 (COX-1), COX-2, and 5-lipoxygenase.

L92 ANSWER 37 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 2001-03139 DRUGU P B E

TITLE: Effects of MK-886 and L-745,337 on growth and apoptosis in HT-29 colon cancer cells.

AUTHOR: Lazzeri G; Blandizzi C; Fulceri F; Danesi R; Del Tacca M

CORPORATE SOURCE: Univ.Pisa LOCATION: Pisa, It.

SOURCE: Biomed.Pharmacother. (54, No. 8-9, 470, 2000)

CODEN: BIPHEX ISSN: 0753-3322

AVAIL. OF DOC.: Division of Pharmacology, Department of Oncology, Transplants

and Advanced Technologies in Medicine, University of Pisa,

Pisa, Italy.

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL: AB; LA; CT
FILE SEGMENT: Literature

AB In-vitro effects of MK-886 and L-745337 on

proliferation and apoptosis of HT29-cells were investigated.

5-Lipoxygenase and cyclooxygenase pathways may have differential roles here. (conference abstract: 6th International Congress on Advances in

Management of Malignancies, Pisa, Italy, 2000).

L92 ANSWER 38 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 2000-23856 DRUGU P E

TITLE: Inhibition of TNF-alpha induced NF-kappa-B activation by

inhibitors of the arachidonate cascade.

AUTHOR: Gilston V; Winyard P G

LOCATION: London, U.K.

SOURCE: Rheumatol. (39, Abstr. Suppl., 3, 2000) ISSN:

1462-0324

AVAIL. OF DOC.: Bone and Joint Research Unit, St. Bartholomew's and the Royal

London School of Medicine and Dentistry, Charterhouse Square,

London EC1M 6BQ, England. (P.G.W.).

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

AB In-vitro exposure to NS-398 or MK-

886 prevented activation of transcription factor NF-kappa-B by tumor necrosis factor-alpha (TNF-alpha) in Jurkat-cells. Inhibitors of other reactive oxygen intermediate-generating enzymes failed to prevent

NF-kappa-B activation here. Cyclooxygenase-2 (

cox-2) and 5-lipoxygenase (5-LO) may have an important

role in TNF-alpha-induced NF-kappa-B activation. (conference abstract: British Society for Rheumatology XVIIth Annual General Meeting and the British Health Professionals in Rheumatology Spring Meeting, Brighton, U.K., 2000).

L92 ANSWER 39 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 1999-24135 DRUGU P E

TITLE: Relationship of arachidonic acid metabolizing enzyme

expression in epithelial cancer cell lines to the growth

effect of selective biochemical inhibitors.

AUTHOR: Hong S H; Avis I; Vos M D; Martinez A; Treston A M; Mulshine

JЬ

CORPORATE SOURCE: Nat.Cancer-Inst.Bethesda

LOCATION: Bethesda, Md., USA

SOURCE: Cancer Res. (59, No. 9, 2223-28, 1999) 3 Fig. 3 Tab. 36 Ref.

CODEN: CNREA8 ISSN: 0008-5472

AVAIL. OF DOC.: Cell and Cancer Biology Depart., Medicine Branch, National

Cancer Institute, Building 10/12N226, 9000 Rockville Pike,

Bethesda, MD 20892-1906, U.S.A. (J.L.M.). (e- mail:

mulshinej@bprb.nci.nih.gov).

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL: AB; LA; CT
FILE SEGMENT: Literature

AB The relationship between enzyme expression status and growth inhibition

by the biochemical inhibitors, AA-861 (docebenone), MK-886, baicalein, CDC, NDGA (nordihydroguaiaretate), ETYA (eicosatetraynoate; RO-3-1428), aspirin, NS-398 (all Biomol) and indomethacin was evaluated in 4 cancer cell lines with defined expression status for 12-LOX, 15-LOX and cox-2 ; SKBR3, ZR75, T47D and COLO205. LOX inhibitors showed high growth inhibition, whereas COX inhibitors (aspirin and NS-398) showed little effect on growth. The degree of inhibition was not correlated with the expression status of the enzymes. Results demonstrate that mRNA expression status for arachidonic metabolizing enzymes does not reliably predict the level of growth inhibition by defined arachidonic acid metabolism inhibitors.

ANSWER 40 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 1999-00392 DRUGU PΕ

Modulation by lipid mediators of immune complex-induced lung TITLE:

inflammation in mice.

Steil A A; Tavares de Lima W; Jancar S AUTHOR: CORPORATE SOURCE: Univ. Vale-do-Itajai; Univ. Sao-Paulo Santa Catarina; Sao Paulo, Braz. LOCATION:

SOURCE: Eur. J. Pharmacol. (361, No. 1, 93-99, 1998) 3 Fig. 1 Tab. 33

Ref.

CODEN: EJPHAZ ISSN: 0014-2999

Department of Immunology, Institute of Biomedical Sciences, AVAIL. OF DOC.:

University of Sao Paulo, Av. Prof. Lineu Prestes 2415, 05508-900 Sao Paulo, SP, Brazil. (S.J.).

LANGUAGE: English DOCUMENT TYPE: Journal FIELD AVAIL.: AB; LA; CT Literature FILE SEGMENT:

The present study characterized a murine model of immune complex-induced pneumonitis and investigated the role of PAF and eicosanoids as mediators of lung neutrophil infiltration and hemorrhagic lesions, using the antagonists: i.v. WEB-2170 (Boehr.Ingelheim), i.v. indometacin (IND; Sigma-Chem.), p.o. MK-886 (Merck-Frosst) and p.o. RO-0254094 (Roche). It was demonstrated that neutrophil infiltration and

vascular lesions in this Arthus reaction model of immune complex-induced

pneumonitis in mice are mediated by LTB4.

ANSWER 41 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 1999-00185 DRUGU PΕ

TITLE: Inhibitors of lipoxygenase: a new class of cancer

> chemopreventive agents. Rioux N; Castonguay A

CORPORATE SOURCE: Univ.Laval

LOCATION: Quebec City, Que., Can.

Carcinogenesis (London) (19, No. 8, 1393-400, 1998) 3 Fig. 4 SOURCE:

Tab. 49 Ref.

AUTHOR:

CODEN: CRNGDP ISSN: 0143-3334

AVAIL. OF DOC.: Laboratory of Cancer Etiology, Faculty of Pharmacy, laval

University, Quebec City, Canada G1K 7P4. (A.C.).

LANGUAGE: English

DOCUMENT TYPE: Journal FIELD AVAIL.: AB; LA; CT FILE SEGMENT: Literature

Chronic dietary A-79175 (Abbott), MK-886

(Merck-Frosst), aspirin (ASA, Sigma-Chem.) and ASA + A-79175 inhibited the multiplicity of p.o. NK (4-(methylnitrosamino) - 1-(3-pyridyl)-1butanone, Chemsyn)-induced lung tumors in mice, with the combination of ASA and A-79175 being the most effective. MK-886 and A-79175 were more effective than ASA at decreasing the proliferation of 82-132 and LM2 murine lung tumor cells. Following exposure to soybean lipoxygenases +/- murine lung microsomal proteins, activation NNK by alpha-carbon hydroxylation was inhibited by arachidonate and A-79175. The results suggest that inhibitor of 5-lipoxygenase may be useful agents for preventing the development of lung tumors.

L92 ANSWER 42 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 1998-38128 DRUGU P TITLE: Inhibition of COX-2 and

induction of apoptosis: two determinants of NSAIDs chemopreventive efficacies in mouse lung tumorigenesis.

AUTHOR: Yao R; Rioux N; Castonguay A; You M

CORPORATE SOURCE: Med.Coll.Ohio; Univ.Laval

LOCATION: Toledo, Ohio, USA; Quebec City, Que., Can.

SOURCE: Proc.Am.Assoc.Cancer Res. (39, 89 Meet., 195, 1998) ISS

N: 0197-016X

AVAIL. OF DOC.: Department of Pathology, Medical College of Ohio, Toledo, OH

43609, U.S.A.

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

AB Acetysalicyclate, paracetamol and NS-398 reduced the number of lung multiplicities, increased the apoptotic index and significantly inhibited the expression of COX-2 in mice treated with the carcinogen 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK). These results suggest lung tumor prevention involved both the induction of apoptosis and the inhibition of prostaglandin synthesis. (conference abstract).

L92 ANSWER 43 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 1998-15439 DRUGU T

TITLE: Enzyme-inhibitors as drugs. (Part III).

AUTHOR: Nuhn P

CORPORATE SOURCE: Univ.Martin-Luther

LOCATION: Halle, Ger.

SOURCE: Pharm.Unserer Zeit (27, No. 1, 12-17, 1998) 33 Ref.

CODEN: PHUZBI ISSN: 0048-3664

AVAIL. OF DOC.: Fachbereich Pharmazie, Martin-Luther-Universitaet

Halle-Wittenberg, Wolfgang-Langenbeck-Str. 4, 06120 Halle,

Germany.

LANGUAGE: German
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

The use of enzyme-inhibitors as drugs is reviewed with reference to inhibitors of the biosynthesis of mediators of inflammation, protease inhibitors, inhibitors of enzymes involved in carbohydrate and fat metabolism, and inhibitors of carbonic anhydrase. Protease inhibitors are used in treatment of coagulation disorders, hemorrhagic shock, septic shock, inflammatory diseases (pancreatitis, rheumatoid arthritis, acute respiratory syndrome, lung emphysema) and ulceration of the cornea. Inhibitors of carbohydrate metabolism can be used in combination with insulin to prevent accumulation of sorbitol and fructose. Inhibitors of carbonic anhydrase are used as diuretics and antiepileptics, and in

treatment of glaucoma.

ANSWER 44 OF 53 DRUGU COPYRIGHT 2002 THOMSON DERWENT

ACCESSION NUMBER: 1996-23186 DRUGU PBE

New pharmacological strategies for pain relief. TITLE:

Dray A; Urban L AUTHOR:

CORPORATE SOURCE: Sandoz

London, U.K. LOCATION:

Annu. Rev. Pharmacol. Toxicol. (36, 253-80, 1996) 4 Fig. 193 SOURCE:

Ref.

ISSN: 0362-1642 CODEN: ARPTDI

AVAIL. OF DOC.: Astra Pain Research Unit, 275 boul. Armand Frappier, Laval,

Quebec, Canada H7V 4A7.

LANGUAGE: English DOCUMENT TYPE: Journal AB; LA; CT FIELD AVAIL.: FILE SEGMENT: Literature

New pharmacological strategies for pain relief are reviewed. New targets for analgesic drug development include inhibition of inflammatory mediators (kinins, growth factors), newly expressed proteins (B1

receptors, cox-2) and blockers of afferent fiber

activity (capsaicin analogs, ion channel blockers). In the CNS more strategies can be pursued, including development of antagonists of specific neuropeptide and glutamate receptors or agonists for purine and amine receptors. Such drugs will inevitably supplement or replace conventional NSAID and opioid analgesics. Further characterization of gene regulation will allow the development of drugs that genetically modify cellular activity altered by chronic pain.

L92 ANSWER 45 OF 53 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002172169 EMBASE

New trends in dual 5-LOX/COX inhibition. TITLE:

de Leval X.; Julemont F.; Delarge J.; Pirotte B.; Dogne AUTHOR:

J.-M.

X. de Leval, University of Liege, Department of Medicinal CORPORATE SOURCE:

Chemistry, 1 avenue de l'Hopital, B-4000 Liege, Belgium.

xdeleval@ulg.ac.be

Current Medicinal Chemistry, (2002) 9/9 (941-962). SOURCE:

Refs: 214

ISSN: 0929-8673 CODEN: CMCHE7

Netherlands COUNTRY:

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE: English SUMMARY LANGUAGE: English

Dual inhibitors are drugs able to block both the COX and the 5-LOX metabolic pathways. The interest of developing such compounds is supported by a large number of pharmacological studies. Compared to COX or LOX pathways single inhibitors, dual inhibitors present at least two major advantages. First, dual inhibitors, by acting on the two major arachidonic acid metabolic pathways, possess a wide range of anti-inflammatory activity. Secondly, dual inhibitors appear to be almost exempt from qastric toxicity, which is the most troublesome side effect of COX inhibitors. The mechanism of their gastric-sparing properties is not completely understood, although it has been demonstrated that

leukotrienes significantly contribute to the gastric epithelial injury. Finally, both COX and LOX derivatives (prostanoids and leukotrienes, respectively) are involved in other diseases than inflammation such as cancer proliferation where the use of dual inhibitors could be an interesting approach.

L92 ANSWER 46 OF 53 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2

2001392265 EMBASE

TITLE:

Future advances in COPD therapy.

AUTHOR:

Barnes P.J.

CORPORATE SOURCE:

Prof. P.J. Barnes, National Heart and Lung Institute, Imperial College School of Medicine, Dovehouse St, London

SW3 6LY, United Kingdom. p.j.barnes@ic.ac.uk

SOURCE:

Respiration, (2001) 68/5 (441-448).

Refs: 67

ISSN: 0025-7931 CODEN: RESPBD

COUNTRY:

Switzerland

DOCUMENT TYPE:

Journal; General Review

FILE SEGMENT:

O15 Chest Diseases, Thoracic Surgery and Tuberculosis

026 Immunology, Serology and Transplantation

030 Pharmacology

037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE: English SUMMARY LANGUAGE: English

There is a pressing need for more effective drug treatments for COPD. New bronchodilators include a long-acting anticholinergic tiotropium bromide and a dual .beta.(2)-dopamine(2-)receptor agonist. But no treatments prevent the progression of COPD. Mediator antagonists in development include leukotriene B(4) antagonists, chemokine receptor antagonists and more potent antioxidants. The inflammation of COPD is resistant to corticosteroids, so new anti-inflammatory drugs need to be developed. These include phosphodiesterase-4 inhibitors, nuclear factor-.kappa.B inhibitors and p38 MAP kinase inhibitors. Small molecule protease inhibitors, including neutrophil elastase inhibitors and selective matrix metalloproteinase inhibitors are also in development. Future drug targets may be identified by gene array and proteomics. Copyright.COPYRGT. 2001 S. Karger AG, Basel.

L92 ANSWER 47 OF 53 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 200

2001044744 EMBASE

TITLE:

Platelet-activating factor, eicosanoids, and bradykinin as

targets for adjuvant therapies for sepsis.

AUTHOR:

Fink M.P.

CORPORATE SOURCE:

Dr. M.P. Fink, Critical Care Medicine Division, Univ. of Pittsburgh Medical School, Scaife Hall, 3550 Terrace,

Pittsburgh, PA 15261, United States

SOURCE:

Seminars in Pediatric Infectious Diseases, (2001) 12/1

(30-41). Refs: 218

ISSN: 1045-1870 CODEN: SPIDFJ

COUNTRY:

United States

DOCUMENT TYPE:

Journal; General Review

FILE SEGMENT:

007 Pediatrics and Pediatric Surgery

026 Immunology, Serology and Transplantation

037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE:

English

SUMMARY LANGUAGE: English

The term "autocoid" has been used to denote a diverse group of relatively small molecules that are released by cells and function as autocrine or paracrine hormones. Many autocoids, including thromboxane A(2), various leukotrienes, platelet-activating factor, and bradykinin, are released as part of the inflammatory response and have been implicated in the pathogenesis of sepsis and septic shock. In numerous animal models of sepsis or septic shock, survival, systemic hemodynamics, or organ system function have been improved by administering pharmacologic agents to block the formation of, or the cellular receptors for, various autocoids. Unfortunately, clinical trials of drugs to block prostaglandin formation or the receptors for platelet-activating factor or bradykinin have yielded disappointing results. As a consequence, enthusiasm for this approach for the treatment of sepsis has waned. Copyright .COPYRGT. 2001 by W.B. Saunders Company.

L92 ANSWER 48 OF 53 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 97206333 EMBASE

DOCUMENT NUMBER:

1997206333

TITLE:

Combination of a cyclooxygenase-2 inhibitor with a leukotriene B.

AUTHOR:

Searle G.D.

CORPORATE SOURCE:

. pn29@student.open.ac.uk

SOURCE:

Expert Opinion on Therapeutic Patents, (1997) 7/7

Refs: 12

ISSN: 1354-3776 CODEN: EOTPEG

COUNTRY:

United Kingdom

DOCUMENT TYPE: FILE SEGMENT:

Journal; (Short Survey) 030 Pharmacology

031 Arthritis and Rheumatism 037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

This patent describes administration of several fixed combination of a selective cyclooxygenase-2 inhibitor with a

leukotriene B4 receptor antagonist for the treatment of inflammatory diseases.

L92 ANSWER 49 OF 53 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER:

95309637 EMBASE

DOCUMENT NUMBER: TITLE:

1995309637

Recent developments with investigational drugs potentially

useful in the treatment of allergic and inflammatory

disorders.

AUTHOR:

Carruthers N.I.; Kaminski J.J.

CORPORATE SOURCE:

Schering-Plough Research Institute, 2015 Galloping Hill

Road, Kenilworth, NJ 07033, United States

SOURCE:

Expert Opinion on Investigational Drugs, (1995) 4/10

(1021-1025).

ISSN: 1354-3784 CODEN: EOIDER

COUNTRY:

United Kingdom

DOCUMENT TYPE:

Journal; (Short Survey)

FILE SEGMENT: 005

General Pathology and Pathological Anatomy

Chest Diseases, Thoracic Surgery and Tuberculosis 015

026 Immunology, Serology and Transplantation

029 Clinical Biochemistry 031 Arthritis and Rheumatism 030 Pharmacology

037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE: English English SUMMARY LANGUAGE:

Investigational drugs that either inhibit the metabolism of arachidonic acid to prostaglandins and leukotrienes, or antagonise leukotriene receptors, continue to be evaluated clinically. The encouraging clinical results observed with these agents provide the best opportunity to realise novel chemical entities, which operate by specific and unique mechanisms of action, that are also potentially useful therapeutics for the treatment of allergic and inflammatory disorders. Recently, a commentary on new drugs for asthma and a report describing progress with investigational drugs for treating pulmonary and inflammatory diseases have been published. In addition, the discovery of an 'inducible' form of cyclooxygenase, cox-2, has also stimulated a resurgence of interest to discover selective inhibitors of this enzyme. The intent of this monthly update is to report the current status of investigational drugs that have been described previously, as well as to introduce novel chemical entities that have entered various stages of preclinical and clinical development.

L92 ANSWER 50 OF 53 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V. ACCESSION NUMBER: 95297857 EMBASE

DOCUMENT NUMBER:

1995297857

TITLE:

Pharmacology in Europe.

AUTHOR: Parnham M.J.

CORPORATE SOURCE:

Parnham Advisory Services, Von-Guericke-Allee 4, D-53125

Bonn, Germany

SOURCE:

Drug News and Perspectives, (1995) 8/6 (352-358).

ISSN: 0214-0934 CODEN: DNPEED

COUNTRY:

Spain

DOCUMENT TYPE:

Journal; Conference Article

FILE SEGMENT:

General Pathology and Pathological Anatomy 005

015 Chest Diseases, Thoracic Surgery and Tuberculosis

022 Human Genetics

026 Immunology, Serology and Transplantation

029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE: English

L92 ANSWER 51 OF 53 WPIX (C) 2002 THOMSON DERWENT

2002-666669 [71] ACCESSION NUMBER: WPIX

1997-065309 [06]; 2002-279332 [32] CROSS REFERENCE:

DOC. NO. CPI: C2002-187040

New combination of a cyclooxygenase-2 TITLE:

inhibitor and a leukotriene B4

receptor antagonist, useful for treating inflammatory disorders, especially arthritis.

DERWENT CLASS:

ANDERSON, G D; GREGORY, S A; ISAKSON, P C INVENTOR(S):

PATENT ASSIGNEE(S): (PHAA) PHARMACIA CORP

COUNTRY COUNT: 1

PATENT INFORMATION:

KIND DATE WEEK LA PG PATENT NO

US 2002107276 A1 20020808 (200271)* 20

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
US 2002107276 A1 CIP of Cont of	US 1995-489415 US 1996-661641 US 2002-38080	19950612 19960611 20020103

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 20021072	76 Al Cont of	US 6342510

PRIORITY APPLN. INFO: US 1996-661641 19960611; US 1995-489415 19950612; US 2002-38080 20020103

AB US2002107276 A UPAB: 20021105

> NOVELTY - Combination of a cyclooxygenase-2 inhibitor (I) and a leukotriene B4 receptor antagonist (II) is new.

> > ACTIVITY - Antiinflammatory; antiarthritic. Test details are described but no results given.

MECHANISM OF ACTION - Cyclooxygenase-2

inhibitor; leukotriene B4 receptor antagonist.

USE - The combination is useful for treating inflammatory disorders, especially arthritis. Dwg.0/0

L92 ANSWER 52 OF 53 WPIX (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2001-638839 [73] WPIX

DOC. NO. CPI:

C2001-188896 TITLE:

New nicotinamide benzofused-heterocyclyl derivatives, useful for the treatment of e.g. seasonal allergic rhinitis, arthritis and gout, are selective inhibitors of

PDE4 isozymes.

DERWENT CLASS: B02

INVENTOR(S): CHAMBER, R J; MARFAT, A PATENT ASSIGNEE(S): (PFIZ) PFIZER PROD INC

COUNTRY COUNT: 94

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2001057036 A1 20010809 (200173)* EN 196

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001027002 A 20010814 (200173)

APPLICATION DETAILS:

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APPLICATION DATE
        PATENT NO KIND
                           _____
                                                            WO 2001-IB124 20010130
AU 2001-27002 20010130
        WO 2001057036 A1
        AU 2001027002 A
FILING DETAILS:
                                                               PATENT NO
        PATENT NO KIND
        ______
        AU 2001027002 A Based on
                                                              WO 200157036
PRIORITY APPLN. INFO: US 2000-179284P 20000131
        WO 200157036 A UPAB: 20011211
        NOVELTY - New nicotinamide benzofused-heterocyclyl derivatives (I).
                DETAILED DESCRIPTION - Nicotinamide benzofused-heterocyclyl
        derivatives of formula (I) and its salts are new:
        m = 0-2;
        n = 1 \text{ or } 2;
                W' = -O-, -S(=O)t- or -N(R3)-;
        t = 0-2;
                R3 = H, 1-3C alkyl, 1-3C alkoxy, OH, phenyl or benzyl; R4 = (a) H, F, Cl, 2-4C alkynyl, R12, OR12, S(=0)pR12, -C(=0)OR12,
        OR(=0)R12, CN, NO2, substituted amines (substituted by R12, R14 and R15),
        (b) 1-4C alkyl or 1-4C alkoxy, all optionally substituted by 0-3 F or Cl \,
        or 0-1 of 1-2C alkoxycarbonyl, 1-2C alkylcarbonyl or 1-2C alkylcarbonyloxy
        or (c) aryl or heterocyclic);
                R5, R6 taken together = a substituent of formula (ii)-(vi);
                R7, R8 = H, CH3, OR14 or R14;
                Z = OR12, C(=O)R12 or CN;
                R14 = H, CH2 or CH2CH3;
                R15 = H, C(=0) OR12, C(=0) NR12R13, 1-4C alkyl, 2-4C alkenyl, 1-2C
        alkoxy, 3-7C cycloalkyl or phenyl (alkyl, alkenyl, alkoxy, cycloalkyl and
        phenyl are substituted by 0-2 R21;
                R21 = F, C1, C(=0) OR23, OH, CN, C(=0) NR23R24, NR23R24, NR23C(=0) R24,
        NR23C(=0)OR24, NR23S(=0)PR24 or S(=0)PNR23R24, 1-4C alkyl including
        dimethyl or 1-4C alkoxy (alkyl and alkoxy are substituted by 0-3 F, Cl,
        1-2C alkoxycarbonyl, 1-2C alkylcarbonyl or 1-2C alkylcarbonyloxy;
                R23, R24 = H or 1-2C alkyl;
                Y' = = C(RE) - or -(N-->(O))-;
                RE = H, F, Cl, CN, NO2; 1-4C alkyl, 2-4C alkynyl, fluorinated 1-3C
        alkyl, 1-3C alkoxy, fluorinated 1-3C alkyloxy, OH or C(=O)NR12R13;
                RA, RB = H, F, CF3, 1-6C alkyl, 3-7C cycloalkyl, phenyl, benzyl or a
        heterocyclic; and
                R10 = F, C1, CF3, CN, 1-2C alkyl, OR12, C(=0)OR12, -O-C(=0)R13,
        C(=0)NR12R13, O-C(=0)R13, -C(=0)NR12R13, -O-C(=0)NR12R13, NR12R13, NR12, NR12,
        NR12C(=0)R13, NR12C(=0)OR13, NR12S(=0)2R13 or S(=0)2NR12R12; and
                R12, R13 = H, 1-4C alkyl, 2-4C alkynyl, 3-6C cycloalkyl, phenyl,
        benzyl or a monocyclic heterocyclic; or
                RA and RB taken together = a spiro moiety of formula (i) (provided m
        = 1), which is substituted as to any one or more carbon atoms, by 0-3
        substituents R10;
        r, s = 0-4;
                QA = -CH2-, -CHF, -CF2, NF2, -NR12-, -O- or -S(=O)-;
        t = 0-2;
                RC, RD = as for RA and RB, except that at least one of RC and RD must
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R1, R2 = H, F, C1, OR12, S(=O)pR12, -C(=O)OR12, OC(=O)R12, CN, NO2,

be H;

Q = heterocycle or aryl

With the following proviso's:

- (1) For all other meanings of RA or RB, when R10 as a substituted of RA or RB has the meaning OR12, -O-C(=)R13 or -OC(=O)NR12R13, the positional relationship of them, as a meaning of Z, is other than a vicinal one; and
 - (2) the sum of r = s is at least 1 but not greater than 5. INDEPENDENT CLAIMS are also included for the following:
- (1) pharmaceutical composition for use in treating a subject suffering from a disease, disorder or condition medicated by the PDE4 isozyme, whereby it regulates the activation and degranulation of eosinophils, comprising (I) with a carrier; and
- (2) combination of (I) with other therapeutic compounds.

 ACTIVITY Antiasthmatic; bronchodilator; antiinflammatory;
 antibacterial; virucide; fungicide; opthalmological; antiallergic;
 antidote; protozoacide; antirheumatic; antiarthritic; analgesic; antigout;
 antipyretic; dermatological; antipsoriatic; neuroprotective; vasotropic;
 hepatotropic; antiulcer; cytostatic; antidiabetic; immunomodulator;
 nephrotropic; antidepressant; antiparkinsonian; anti-HIV; nootropic;
 hypotensive.

No appropriate biological data given.

MECHANISM OF ACTION - PDE Isozyme inhibitor; Leukotriene biosynthesis inhibitor; Leukotriene biosynthesis inhibitor; (5-LO) inhibitor; (FLAP) antagonist; isoform PDE4D inhibitor; dual inhibitor of (5-LO); (PAF) antagonist; antihistaminic H1 receptor antagonist; gastroprotective H2 receptor antagonist; alpha 1-and alpha 2-adrenoreceptor agonist vasoconstrictor; beta 1- beta 4-adrenoreceptor agonist; Muscarinic receptor antagonist; COX-1 inhibitor (NSAIDs); COX-2 selective inhibitor; (IGF-1) mimetic; (PAF) antagonist; Anti-tumor necrosis factor (TNF alpha); (ICE) inhibitor; IMPDH inhibitor; VLA-4 antagonist; MAP kinase inhibitor; Glucose-6-phosphate dehydrogenase inhibitor; Kinin-B1- and B2-receptor antagonist; Xanthine oxidase inhibitor; matrix metalloprotease inhibitor.

USE - (I) is useful for treating asthma, including infective asthma caused by bacterial, fungal, protozoal or viral infection, bronchoconstriction, chronic bronchitis, small airways obstruction, emphysema, obstructive or inflammatory airways diseases from pneumoconiosis, chronic eosinophilic pneumonia, chronic obstructive pulmonary diseases such as chronic bronchitis, pulmonary emphysema or dyspnea, pneumoconiosis, etiology or pathogenesis or pneumoconiosis from aluminosis or bauxite worker's disease, anthracosis or minor's asthma, ptilosis, siderosis, silicosis or grinders disease, byssinosis or cotton-dust asthma and talc pneumoconiosis, bronchiectasis, seasonal allergic rhinitis, rheumatoid arthritis, gout and fever and pain, eosinophil-related disorder, dermatitis or eczema, urticaria, conjunctivitis, uveitis, psoriasis, multiple sclerosis, autoimmune/ inflammatory diseases including hemolytic anemia, idiopathic thrombocytopenic purpura, systemic lupus erythematosus, polychondritis, scleroderma, Wegner's granulomatosis, dermatomyositis, chronic active hepatitis, myasthenia gravis, Stevens-Johnson syndrome, idiopathic sprue, autoimmune inflammatory bowel diseases, ulcerative colitis, Crohn's disease, endocrin opthamopathy, Grave's disease, sarcoidosis, alveolitis, chronic hypersensitivity pneumontis, primary bilary cirrhois, diabetes, lung fibrosis, glomerulonephritis, hyperproliferative skin diseases,

psoriasis, dermatitis, benign famillal pemhigus, pemphigus erythematosus, pemphiqus foliaceus, pemphiqus vulgaris, prevention of allergenic graft rejection following organ transplantation, inflammatory bowel disease, septic shock, renal failure, cachexia and Addison's disease, cachexia, liver injury, pulmonary hypertension, osteoporosis, central nervous system disorders e.g. depression, Parkinson's disease, learning and memory impairment, tardive dyskinesia, drug dependence, arteriosclerotic dementia and other dementias, infection, especially infection by viruses such as viruses that increase the production of TNF- alpha in their host such as HIV-1, HIV-2 and HIV-3, cytomegalovirus, CMV, influenza, adenoviruses, herpes viruses, yeast and fungus infections (all claimed uses). Dwg.0/0

L92 ANSWER 53 OF 53 WPIX (C) 2002 THOMSON DERWENT

ACCESSION NUMBER:

2001-565224 [63] WPIX

DOC. NO. CPI:

C2001-167720

TITLE:

New pyrimidine carboxamides are PDE4 isozyme inhibitors useful for treating diseases, disorders or conditions e.g. asthma and bronchitis, mediated by the PDE4 isozyme in which it regulates the activation and degranulation of

eosinophils.

DERWENT CLASS:

INVENTOR(S):

CHAMBERS, R J; MAGEE, T V; MARFAT, A

PATENT ASSIGNEE(S):

(PFIZ) PFIZER PROD INC

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG

WO 2001057025 A1 20010809 (200163)* EN 162

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001027003 A 20010814 (200173)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 20010570	25 A1	WO 2001-IB125	20010130
AU 20010270	03 A	AU 2001-27003	20010130

FILING DETAILS:

PATENT NO	KIND	PAT	TENT NO
AII 20010270	03 A Based	on WO	200157025

PRIORITY APPLN. INFO: US 2000-179282P 20000131

WO 200157025 A UPAB: 20020508

NOVELTY - Pyrimidine carboxamides (I) and their salts are new. DETAILED DESCRIPTION - Pyrimidine carboxamides of formula (I) and their salts are new. j, k, m = 0-1;

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W = -O-, -S(=O) t- or -N(R3)-;
t = 0-2;
     R3 = H, 1-3C alkyl or OR12;
     RA, RB = H, F or CF3 or 1-4C alkyl, 3-7C cycloalkyl or benzyl (each
optionally substituted); or
     when m = 1, RA+RB = spiro moiety of formula (i);
     R10 = F, Cl, CF3, CN, OR12, 1-2C alkyl, hydroxy 1-2C alkyl,
O-C(=O)R13, O-C(=O)NR12R13, NR12R13, NR12C(=O)R13, NR12C(=O)OR13,
-NR12S(=0)2R13 or -S(=0)2NR12R13;
     R12, R13 = H; 1-4C alkyl or benzyl (both optionally substituted);
r, s = 0-4;
     QA = CH2, CHF, CF2, -N(R3), O or S(=0)t;
RC, RD = RA;
     ZA = (un)saturated cyclic or bicyclic 3-9C heterocyclic, 3-7C
cycloalkyl, phenyl or pyridyl (each optionally substituted);
     R9 = H \text{ or } 1-4C \text{ alkyl};
     R16 = F, Cl, CN, OR12, 1-4C alkyl, 3-7C cycloalkyl, CF3, C(=0)OR12,
NO2, NR12R13, 1-4C alkylamino, phenyl or benzyl (each alkyl, alkoxy or
cycloalkyl being optionally substituted);
     R18 = F, Cl, CN, OR12, CF3, NR12R13 or phenyl;
NR14S(=0)pR12 or S(=0)pNR12R13; or 1-4C alkyl or 1-4C alkoxy (each
optionally substituted) or benzyl or heterocyclyl (each optionally
substituted) or when ZA = phenyl, R4 on adjacent C atoms together with the
C atoms to which they are attached and the phenyl ring form benzofused
heterocyclyl;
p = 0-2;
    R14 = H, CH3 or CH2CH3;
     ZB = cyclohexyl, cyclopentenyl, cyclohexenyl, norbornanyl,
norbornenyl, bicyclo(2.2.2)octanyl, bycyclo(3.2.1)octanyl,
bicyclo(3.3.0)octanyl, bicyclo(2.2.2)oct-5-enyl, bicyclo(2.2.2)oct-7-enyl,
bicyclo(3.3.1) nonanyl or adamantanyl;
     R1, R2 = H, F, C1, OR12, -S(=0) pR12, -C(=0) OR12, -OC(=0) R12, CN,
NO2, C(=0)NR12R13, NR12R13 or S(=0)pNR12R13;
     E = H, F, Cl, CN, OR12, 1-4C alkyl, hydroxy 1-4C alkyl, CF3, NO2,
NR12R13, NR12S(=0)2R13 or S(=0)2NR12R13 provided that when R10 = OR12,
OC(=O)R12 or OC(=O)NR12R13 and E = OR12, the positional relationship is
     R7, R8 = H, F, C1, OR12, 1-4C alkyl, hydroxy 1-4C alkyl, CF3,
C(=0)OR12, NR12R13 or hydroxy 1-4C alkylamino or phenyl, benzyl or
heterocyclyl (each optionally substituted); and
with provisos.
    NB: Definitions for R5 and R6 are not given.
    The full definitions are given in the DEFINITIONS (Full Definitions)
Field.
     AN INDEPENDENT CLAIM is also included for a combination of (I) with
one or more compounds (VIII) selected from e.g. leukotriene
biosynthesis inhibitors and receptor antagonists for leucotrienes.
     ACTIVITY - Antiinflammatory; Antiallergic; Antirheumatic;
Antiarthritic; Antipyretic; Antigout; Antiasthmatic; Dermatological;
Cardiovascular-Gen; Respiratory-Gen; Ophthalmological; Antipsoriatic;
Antipruritic; Neuroprotective; Immunosuppressive; Antibacterial;
Hepatoropic; Hypotensive; Osteopathic; Virucide; Anti-HIV; Cytostatic;
Nephrotropic; Antiulcer; Antidiabetic; Vulnerary.
    MECHANISM OF ACTION - PDE4 isozyme inhibitor.
     USE - For treating diseases, disorders or conditions mediated by the
PDE4 isozyme in which it regulates the activation and degranulation of
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eosinophils. The disease, disorder or condition is one or more of asthma, etiology or pathogenesis; chronic or acute bronchoconstriction, chronic bronchitis, small airways obstruction, emphysema, obstructive or inflammatory airways diseases, etiology or pathogenesis; pneumonconiosis, etiology or pathogenesis; seasonal allergic rhinitis, perennial allergic rhinitis, sinusitis, etiology or pathogenesis; rheumatoid arthritis, etiology or pathogenesis; gout and fever and pain associated with inflammation, eosinophil-related disorders, etiology or pathogenesis; atopic dermatitis or allergic dermatitis or allergic or atopic eczema), urticaria of any type, etiology or pathogenesis; conjunctivitis, etiology or pathogenesis; uveitis, etiology or pathogenesis; psoriasis, multiple sclerosis, etiology or pathogenesis; autoimmune diseases, etiology or pathogenesis; prevention of allogeneic graft rejection following organ transplantation, inflammatory bowel disease, etiology or pathogenesis; septic shock, etiology or pathogenesis; liver injury, pulmonary hypertension and hypoxia-induced pulmonary hypertension, bone loss diseases, primary osteoporosis and secondary osteoporosis, central nervous system disorders, etiology or pathogenesis; infection (especially infection by viruses which increase the production of TNF alpha in their host or which are sensitive to upregulation of TNF- alpha in their host so that their replication or other vital activities are adversely impacted, including a virus selected from HIV-1, HIV-2 and HIV-3, cytomegalovirus, CMV, influenza, adenoviruses and Herpes viruses including Herpes zoster and Herpes simplex), yeast and fungus infections in which the yeast and fungi are sensitive to upregulation by TNF- alpha or elicit TNF- alpha production in their host when administered in conjunction with other drugs for the treatment of systemic yeast and fungus infections (including polymixins, Polymycin B, imidazoles, clotrimazole, econazole, miconazole and ketoconazole, triazoles, fluconazole and itranazole and amphotericins, Amphotericin B and liposomal Amphotericin B) and ischemia-reperfusion injury, autoimmune diabetes, retinal autoimmunity, chronic lymphocytic leukemia, HIV infections, lupus erythematosus, kidney and ureter disease, urogenital and gastrointestinal disorders and prostated inflammatory diseases and conditions, respiratory diseases and conditions, infectious diseases and conditions, immune diseases and conditions and other diseases and conditions (comprising bone resorption diseases, reperfusion injury, cachexia secondary to infection or malignancy, cachexia secondary to human acquired immune deficiency syndrome (AIDS), HIV infection or AIDS related complex, keloid formation, scar tissue formation, type 1 diabetes mellitus and leukemia.

=> log hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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	ENTRY	SESSION
CA SUBSCRIBER PRICE	-8.05	-8.05

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